HITACHI
Inspire the Next

PLASMA TELEVISION

AVC (Audio Video Control Center) & Plasma Display Monitor

Operating Guide for 55HDX61A

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ULTRAVISION DIGITAL

As an ENERGY STAR® Partner, Hitachi, Ltd. has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

ENERGY STAR

IMPORTANT SAFETY INSTRUCTIONS

SAFETY POINTS YOU SHOULD KNOW ABOUT YOUR HITACHI PLASMA TELEVISION

Our reputation has been built on the quality, performance, and ease of service of HITACHI Plasma Televisions.

Safety is also foremost in our minds in the design of these units. To help you operate these products properly, this section illustrates safety tips which will be of benefit to you. Please read it carefully and apply the knowledge you obtain from it to the proper operation of your HITACHI Plasma Television.

Please fill out your warranty card and mail it to HITACHI. This will enable HITACHI to notify you promptly in the improbable event that a safety problem should be discovered in your product model.

Follow all warnings and instructions marked on this plasma television. Plasma television consists of AVC center and display monitor.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of a sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: • TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PLASMA TELEVISION TO RAIN OR MOISTURE.
• THE PLASMA TELEVISION SHOULD NOT BE EXPOSED TO DRIPPING OR SPLASHING AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THE TELEVISION.

NOTE: • There are no user serviceable parts inside the AVC center/display monitor.
• Model and serial numbers are indicated on back side of the AVC center/display monitor.

CAUTION: Adjust only those controls that are covered in the instructions, as improper changes or modifications not expressly approved by HITACHI could void the user's authority to operate the Plasma Television.

MODIFICATIONS: The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hitachi America, Ltd. Home Electronics Division may void the user's authority to operate the equipment.

POWER SOURCE

THIS PLASMA TELEVISION IS DESIGNED TO OPERATE ON 120 VOLTS 60Hz, AC CURRENT. INSERT THE AVC CENTER AND DISPLAY MONITOR POWER CORD INTO A 120 VOLT 60Hz OUTLET.

TO PREVENT ELECTRIC SHOCK, DO NOT USE THE PLASMA TELEVISION'S (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES AND GROUND TERMINAL CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NEVER CONNECT THE AVC CENTER/DISPLAY MONITOR TO 50Hz, DIRECT CURRENT, OR ANYTHING OTHER THAN THE SPECIFIED VOLTAGE.

NOTE: This Plasma Television will display television closed captioning, (CC or), in accordance with paragraph 15.119 and 15.122 of the FCC rules.

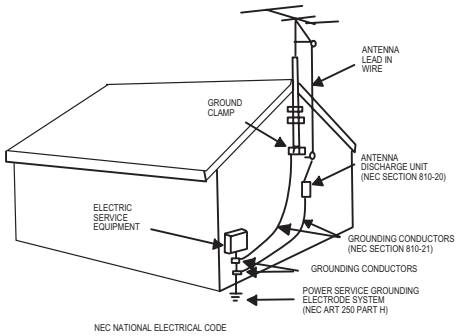
CAUTION: Never remove the back cover of the AVC center/display monitor as this can expose you to very high voltages and other hazards. If the television does not operate properly, unplug the Plasma Television and call your authorized dealer or service center.

IMPORTANT SAFETY INSTRUCTIONS

Read before operating equipment

Follow all warnings and instructions marked on this television.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use the attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Televisions are designed to comply with the recommended safety standards for tilt and stability.
    Do not apply excessive pulling force to the front, or top, of the cabinet which could cause the product to overturn resulting in product damage and/or personal injury.
16. Follow instructions for wall, shelf or ceiling mounting as recommended by the manufacturer.
17. An outdoor antenna should not be located in the vicinity of overhead power lines or other electrical circuits.
18. If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding for the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode.


ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUNDING CONDUCTORS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250 PART H)
NEC NATIONAL ELECTRICAL CODE

Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

This product contains lead. Dispose of this product in accordance with applicable environmental laws. For product recycling and disposal information, contact you local government agency or the Electronic Industries Alliance at www.eiae.org (in the US) or the Electronic Product Stewardship Canada at www.epsc.ca (in Canada). For more information, call "1-800-HITACHI."

Do not place any objects on the top of the television which may fall or cause a child to climb to retrieve the objects.

PREVENTION OF SCREEN BURN

Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to television receivers. Such "SCREEN BURNS" constitute misuse and are **NOT COVERED** by your HITACHI Factory Warranty.

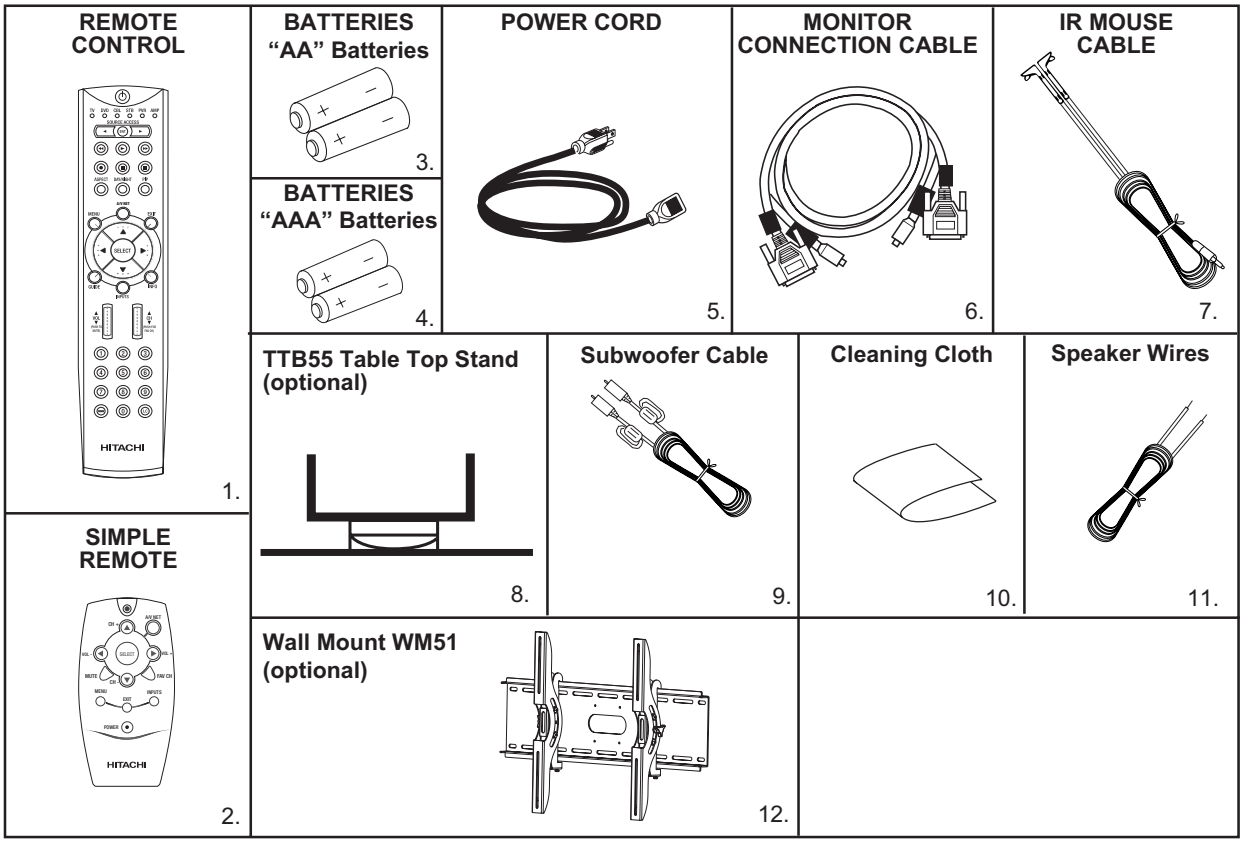
PUBLIC VIEWING OF COPYRIGHTED MATERIAL

Public viewing of programs broadcast by TV stations and cable companies, as well as programs from other sources, may require prior authorization from the broadcaster or owner of the video program material.

- This digital television is capable of receiving analog basic, digital basic and digital premium cable television programming by direct connection to a cable system providing such programming. A CableCARD provided by your cable operator is required to view encrypted digital programming. Certain advanced and interactive digital cable services such as video-on-demand, a cable operator's enhanced program guide and data-enhanced television services may require the use of a set-top box. For more information call your local cable company.
- This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited consumer uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

ACCESSORIES

Check to make sure you have the following accessories before disposing of the packing material.



CAUTION: 1. Ceiling mounting is not recommended. Mounting the panel on the ceiling does not provide adequate ventilation for the electronics or proper support for the front glass panel. This plasma television product is designed for a maximum tilting angle of 45 degrees from vertical.
2. This TTB55 stand for use only with Hitachi 55HDX61A. Use with other apparatus is capable of resulting in instability causing possible injury. See important marking located on bottom of stand.
3. The plasma display wall mount unit WM51 is for use only with Hitachi model 55HDX61A.

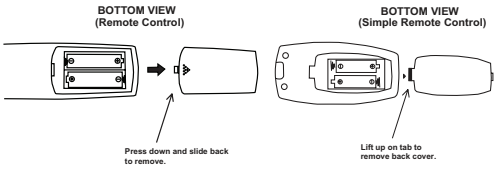
1. Remote Control Unit CLU-3843WL (P# HL02063).
2. Simple Remote Control Unit CLU-122S (P# HLO1863).
3. Two "AA" size, 1.5V batteries (P# FQ00021).
4. Two "AAA" size, 1.5V batteries (P# FQ00061).
5. Power Cord:

Plasma Monitor	EV01841
AVC	EV01841

6. Monitor Connection Cable (P# EW07883).
7. Two IR Mouse cables (P# EY01641).
8. 55" Table Top Stand (TTB55) (P# QJ01442K).
9. Sub Woofer Cable (P# VZ11701).
10. Cleaning Cloth (P# MS00931).
11. Speaker wires (for monitor speakers).
12. Wall Mount (WM51) (P# QX00564).

REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

1. Open the battery cover of the remote control by pushing the notched part of the cover with your fingers and pulling the cover off.
2. Insert two new "AA" and "AAA" size batteries for the remote control and Simple Remote Control respectively. When replacing old batteries, push them towards the springs and lift them out.
3. Match the batteries to the (+) and (-) marks in the battery compartment.
4. Replace the cover.


BOTTOM VIEW
(Remote Control)
BOTTOM VIEW
(Simple Remote Control)
Press down and slide back to remove.
Lift up on tab to remove back cover.

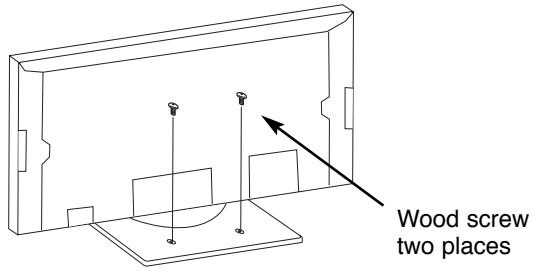
CAUTION: Danger of explosion if battery is incorrectly replaced. Replace with the same or equivalent type.

HOW TO SETUP YOUR NEW HITACHI PLASMA TELEVISION

To take measures to prevent the Plasma Display from tipping over and prevent possible injury it is important to mount the unit in a stable place.

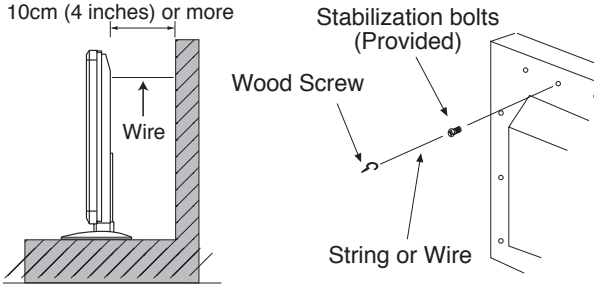
Securing to a table-top

1. Using wood screws (two) fasten the set to the clamping screw holes on the rear of the Plasma Display stand as shown below.
2. Using commercially available wood screws, secure the set firmly in position.



Securing to a wall

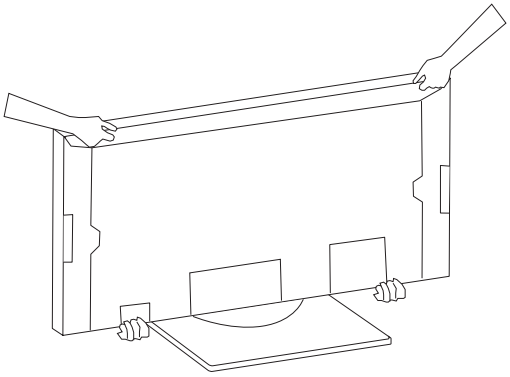
1. Keep the Plasma Display monitor four inches away from the wall except those hung to the wall mount bracket.
2. Secure the monitor to the wall as shown below.

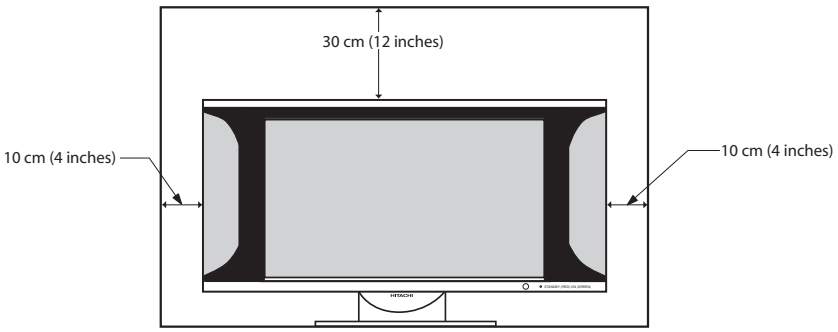


NOTES:
1. Do not block the ventilation holes of the Plasma Display monitor or the AVC center. Blocking the ventilation holes might cause fire or defect.
2. The plasma television has two AC cords, one on the AVC center and the other on the Plasma Display monitor. In case of an abnormal symptom, unplug both AC cords.
3. If you purchased the wall mount bracket option, please ask for professional installer. Do not install by yourself.

Caution when moving the main unit

As this product is heavy, whenever it is moved, two people are required to transport it safely. Whenever the unit is moved it should be lifted forward using the top and base on both sides of the Display Monitor for stability. When moving the Display Monitor, lift the handles and the bottom frame as shown below. Do not grab the speakers or the back cover when lifting.





ANTENNA

Unless your Plasma Television is connected to a cable TV system or to a centralized antenna system, a good outdoor color TV antenna is recommended for best performance. However, if you are located in an exceptionally good signal area that is free from interference and multiple image ghosts, an indoor antenna may be sufficient.

LOCATION

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows a free flow of air to and from the perforated back cover of the set. In order to prevent an internal temperature increase, maintain a space of 10 cm (4 inches) from the sides/back of the monitor, and 30 cm (12 inches) from the top of the television to the wall. To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot, for example, in direct sunlight or near a heating appliance, etc.

HOW TO SET UP YOUR NEW HITACHI PLASMA TELEVISION

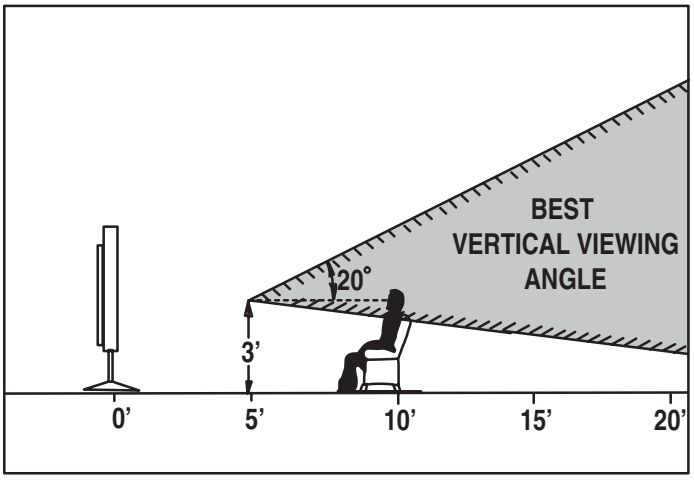
VIEWING

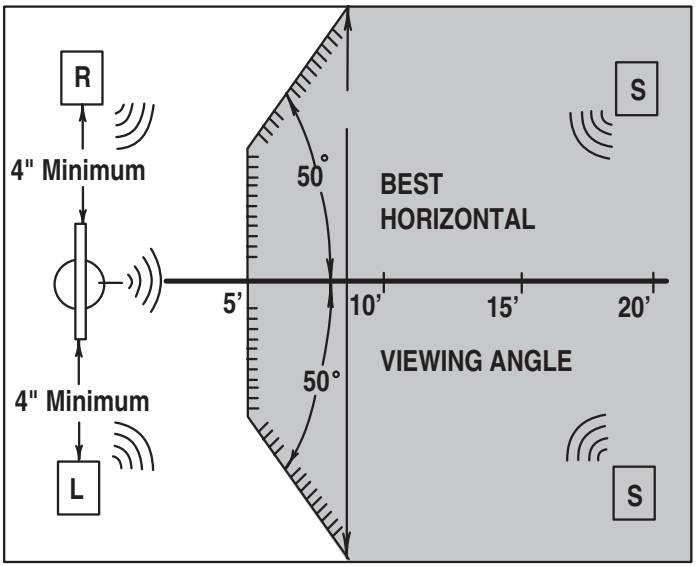
The major benefit of the HITACHI Plasma Television is its large viewing screen. To see this large screen at its best, test various locations in the room to find the optimum spot for viewing.

The best picture is seen by sitting directly in front of the TV and about 8 to 18 feet from the screen.

During daylight hours, reflections from outside light may appear on the screen. If so, drapes or screens can be used to reduce the reflection or the TV can be located in a different section of the room.

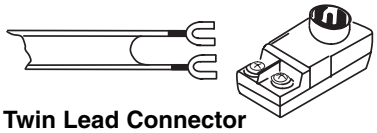
If the TV's audio output will be connected to a Hi-Fi system's external speakers, the best audio performance will be obtained by placing the speakers equidistant from each side of the receiver cabinet and as close as possible to the height of the picture screen center. For best stereo separation, place the external speakers at least four feet from the side of the TV, place the surround speakers to the side or behind the viewing area. Differences in room sizes and acoustical environments will require some experimentation with speaker placement for best performance.





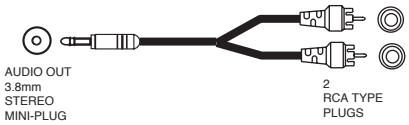
HOOKUP CABLES

Most video/audio connections between components can be made with shielded video and audio cables that have phono connectors. For best performance, video cables should use 75-Ohm coaxial shielded wire. Cables can be purchased from most stores that sell audio/video products. Below are illustrations and names of common connectors. Before purchasing any cables, be sure of the output and input connector types required by the various components and the length of each cable.

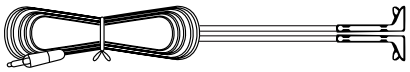


300-Ohm Twin Lead Connector
This outdoor antenna cable must be connected to an antenna adapter (300-Ohm to 75-Ohm).

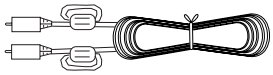
Phono Connector
Used on all standard video and audio cables which connect to inputs and outputs located on the rear jack panel and front control panel.



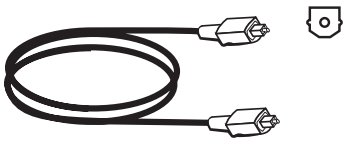
Stereo Cable (3.5 mm plug to 3.5 mm plug)
This cable is used to connect from external audio out to the audio input of the AVC Center (ex. RGB Input).



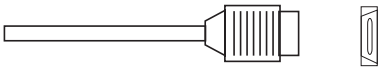
IR Mouse Cable (Provided)
Connect the IR Mouse to the IR output on your AVC center when A/V Network is used. You must place the IR mouse in front of the corresponding IR window of your cable box and VCR. This connection allows your TV to control your cable box and VCR.



Subwoofer Cable (Provided)
This cable is used to connect an external audio component input to the subwoofer output of the Display Monitor.



Optical Cable
This cable is used to connect to an audio amplifier with an Optical Audio In jack. Use this cable for the best sound quality.

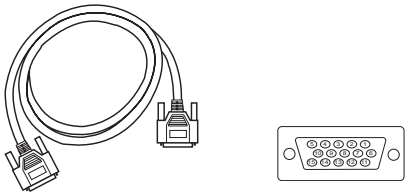


HDMI Cable
This cable is used to connect your external devices such as Set-Top-Boxes or DVD players equipped with an HDMI output connection to the TV's HDMI input.

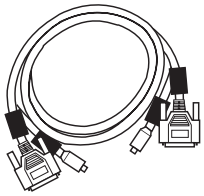
IEEE1394 Cable
This cable is used to connect your digital television to external digital devices.This cable will carry both the video and audio information.

"F" Type 75-Ohm Coaxial Antenna Connector
For connecting RF signals (antenna or cable TV) to the antenna jack on the television.

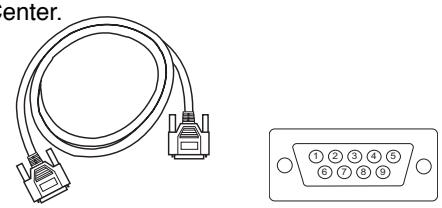
S-Video (Super Video) Connector
This connector is used on camcorders, VCRs and laser-disc players with an S-Video feature in place of the standard video cable to produce a high quality picture.



D-SUB MINI 15-Pin Cable
This cable is used to connect a computer output to the D-SUB input located on the rear panel of the AVC Center. The resolution should be set correctly to display the signal on the Plasma Television.



Monitor Connection Cable (Provided)
This cable is used to connect the Display Monitor to the AVC Center.



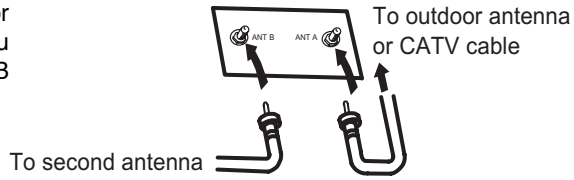
D-SUB MINI 9-Pin Cable
This cable is used to connect to the RS232C input located on the rear panel so you can control some of your TV functions from an external home control system.

USB Cable
This cable is used to connect your digital camera to the Photo Input in the front of the AVC.

ANTENNA CONNECTIONS TO REAR PANEL JACKS

VHF (75-Ohm) antenna/CATV (Cable TV)

When using a 75-Ohm coaxial cable system, connect the outdoor antenna or CATV coaxial cable to the ANT A (75-Ohm) terminal. If you have a second antenna, connect the coaxial cable to the ANT B terminal.

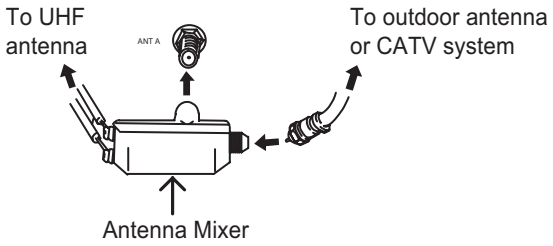


VHF (300-Ohm) antenna/UHF antenna

When using a 300-Ohm twin lead from an outdoor antenna, connect the VHF or UHF antenna leads to screws of the VHF or UHF adapter. Plug the adapter into the antenna terminal on the TV.

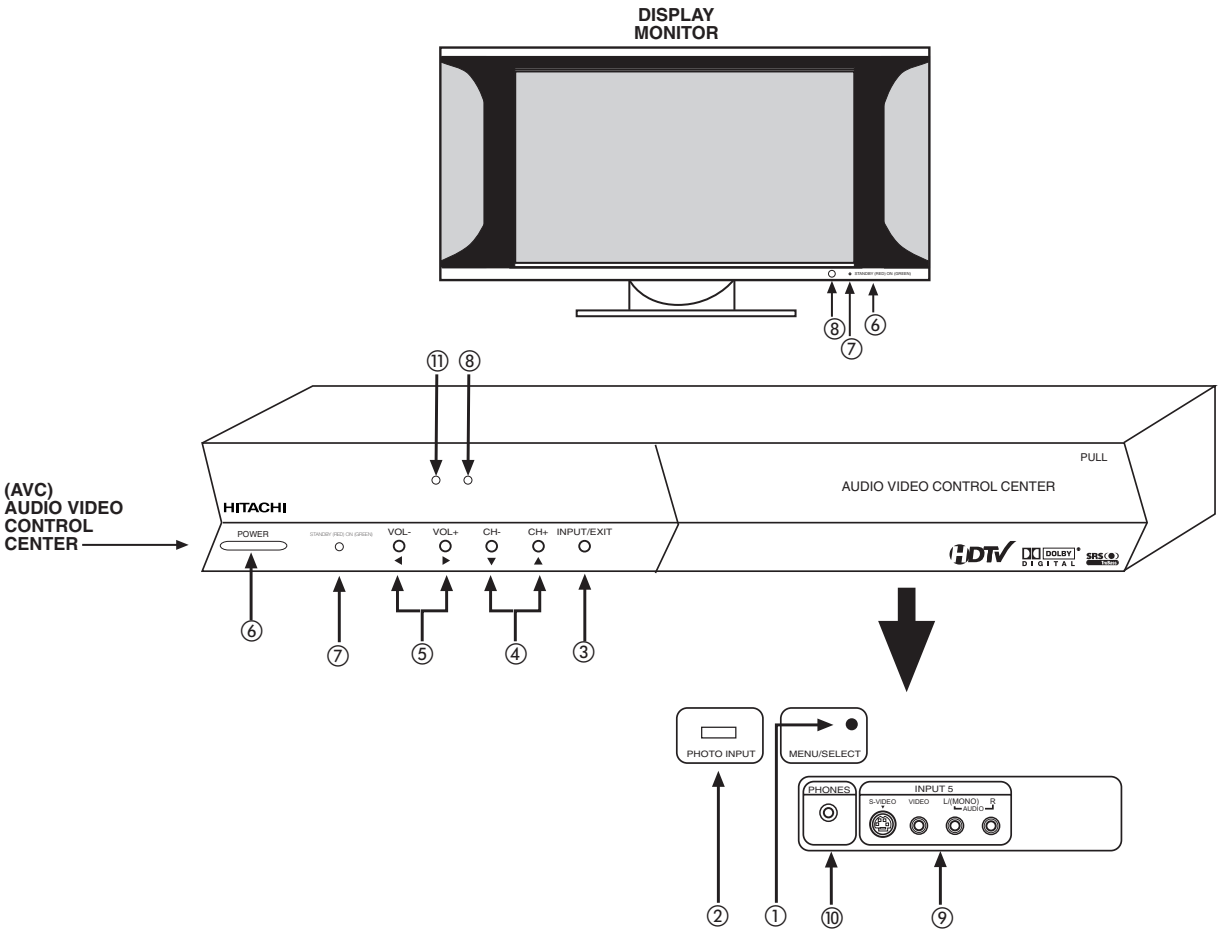
When both VHF and UHF antennas are connected

Attach an optional antenna cable mixer to the TV antenna terminal, and connect the cables to the antenna mixer. Consult your dealer or service store for the antenna mixer.



FRONT PANEL CONTROLS

FRONT VIEW



① **MENU/SELECT button**
This button allows you to enter the MENU, making it possible to set TV features to your preference without using the remote. This button also serves as the SELECT button when in MENU mode.

② **PHOTO INPUT**
Insert USB cable from your Digital Camera to view your digital still pictures (see pages 35-37).

③ **INPUT/EXIT button**
Press this button to access the INPUT menu. Press again to exit the MENU mode.

④ **CHANNEL selector**
Press these buttons until the desired channel appears in the top right corner of the TV screen. These buttons also serve as the cursor down (▼) and up (▲) buttons when in MENU mode.

⑤ **VOLUME level**
Press these buttons to adjust the sound level. The volume level will be displayed on the TV screen. These buttons also serve as the cursor left (◄) and right (►) buttons when in MENU mode.

⑥ **POWER button**

Display Monitor "MAIN POWER" button

This power button is for the complete system, and must be turned ON/OFF manually. It is recommended to leave the "MAIN POWER" to ON condition (lights red) for stand-by mode.

The Main Power button is located on the Back side, under the label "MAIN POWER".

AVC POWER button

The AVC power can be turned ON/OFF manually or by remote control. Turning on the AVC Power will only turn on the AVC box if the "MAIN POWER" of the display monitor is off.

⑦ **POWER light indicator**

To turn the monitor ON, press the main power switch located on the lower right side of the monitor. A red stand-by indicator lamp located on the lower right corner of the front bezel will illuminate. The PDP is now ready for remote on/off operation.

Indicating Lamp	Power Status	Operating
Off	Off	When the main power switch is set OFF.
Lights Red	Off (Stand-by)	When the main power switch on the display monitor is ON, and the AVC Center is OFF.
Lights Green	On	Display monitor MAIN POWER is ON and AVC Center power is ON.
Lights Orange (Flashing)	Off (Power Saving)	Display monitor MAIN POWER is ON and and AVC Center power is ON, with no signal input except antenna (no sync. signal).

⑧ **REMOTE CONTROL sensor**

Point your remote at this area when selecting channels, adjusting volume, etc.

⑨ **FRONT INPUT JACKS (for VIDEO: 5)**

Use these audio/video jacks for a quick hook-up from a camcorder or VCR to instantly view your favorite show or new recording. Press the INPUTS button then use the CURSOR PAD and the SELECT button on the remote control to select INPUT 5. If you have mono sound, insert the audio cable into the left audio jack.

⑩ **PHONES JACK**

Use this jack for your head-phones. The TV's internal speakers can also be heard. Turn off the internal speakers (see page 60) if you wish to listen to the head-phones only.

⑪ **LEARNING AV NET Sensor**

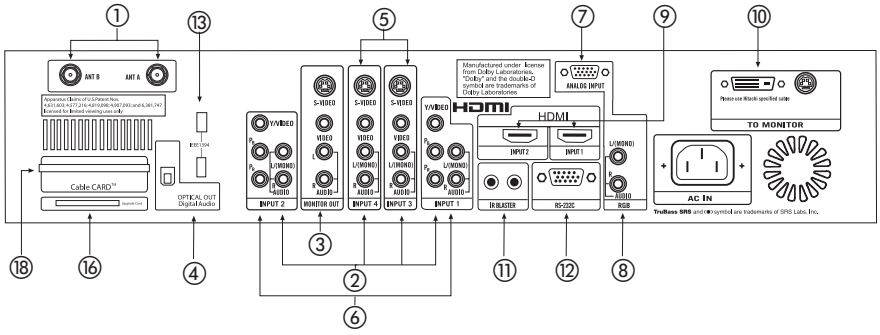
Point your equipment's remote control at this area while using the AV NET Learning Wizard.

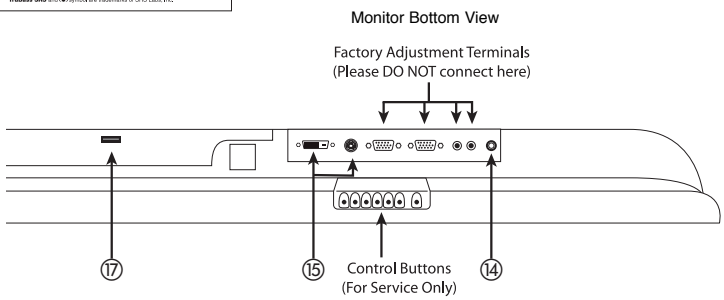
NOTES: 1. Your HITACHI Plasma TV will appear to be turned OFF (lights orange) if there is no video input when VIDEO: 1, 2, 3, 4, 5, or RGB is selected. Check the Power Light to make sure the Display Monitor is turned off or in Stand-by mode (lights red) when not in use.

2. Remote Control can not turn ON/OFF the "MAIN POWER" of the display monitor.

REAR PANEL JACKS

Audio Video Control Center (AVC)





① **Antenna Input**
The remote control allows you to switch between two separate 75-Ohm RF antenna inputs, ANT A and ANT B. ANT A input can be displayed as a main picture or sub-picture. ANT B can only be displayed as a main picture (ANT B cannot be displayed as a sub-picture).

② **Audio/Video Inputs 1, 2, 3 and 4**
By using the INPUTS button, the CURSOR PAD (▲ and ▼), and the SELECT button or CURSOR PAD ▶ of the remote control, you can select each video source. Use the audio and video inputs to connect external devices, such as VCRs, camcorders, laserdisc players, DVD players etc. (if you have mono sound, insert the audio cable into the left audio jack).

③ **MONITOR OUT**
These jacks provide fixed audio and video signals (ANT A/B, INPUT 1~5) which are used for recording. Use the S-VIDEO Output for high quality video output. Component signal to Input 1 and 2, RGB and HDMI inputs will not have monitor output.

④ **Optical Out (Digital Audio)**
This jack provides Digital Audio Output for your audio device that is Dolby® Digital and PCM compatible, such as an audio amplifier.

⑤ **S-VIDEO Inputs 3 and 4**
Inputs 3 and 4 provide S-VIDEO (Super Video) jacks for connecting equipment with S-VIDEO output capability.

NOTES:
1. You may use VIDEO or S-VIDEO inputs to connect to INPUT 3 and 4, but only one of these inputs may be used at a time.
2. S-VIDEO output may be used for recording, only when the input is of S-VIDEO type.

⑥ **Component: Y-P_BP_R Inputs**
Inputs 1 and 2 provide Y-P_BP_R jacks for connecting equipment with this capability, such as a DVD player or Set Top Box. You may use composite video signal for INPUTS 1 and 2.

NOTES:
1. DO NOT connect composite VIDEO and S-VIDEO to Input 3, 4 or 5 at the same time. S-Video has a higher priority over video input.
2. Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the AVC Box's P_B input and the components R-Y output to the AVC Box's P_R input.
3. Your component outputs may be labeled Y-C_BC_R. In this case, connect the component C_B output to the AVC Box's P_B input and the component C_R output to the AVC Box's P_R input.
4. It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-P_BP_R inputs (See page 56).
5. To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-P_BP_R jacks, RGB and HDMI inputs.

REAR PANEL JACKS

⑦ **RGB - Analog Input**
Use this 15-pin D-Sub input for your external devices with RGB output (see page 26).

⑧ **RGB - Audio Input**
Connect audio for RGB input (if you have mono sound, insert the audio cable into the left audio jack).

⑨ **HDMI - Digital Input (INPUT 1 and INPUT 2)**
About HDMI
HDMI is the next-generation all digital interface for consumer electronics. HDMI enables the secure distribution of uncompressed high-definition video and multi-channel audio in a single cable. Because digital television (DTV) signals remain in digital format, HDMI assures that pristine high-definition images retain the highest video quality from the source all the way to your television screen.

Use the HDMI input for your external devices such as Set-Top-Boxes or DVD players equipped with an HDMI output connection.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

NOTES: 1. The HDMI input is not intended for use with personal computers.

2. Only DTV formats such as 1080i, 720p, 480i and 480p are available for HDMI input.

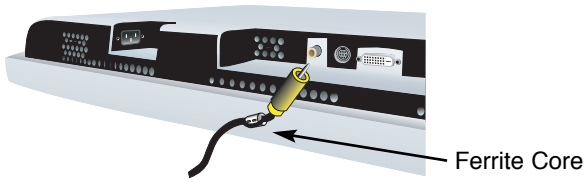
⑩ **To Monitor**
Connect the Monitor Connection Cable to the AVC center's "TO MONITOR" connector, and to the display monitor's "FROM AVC" connector.

⑪ **IR Blaster**
This jack provides IR output to your external components (VCR, Cable box, DVD player, etc.). With this connection, your external components can automatically be controlled by the A/V network feature. This connection will allow you to control the external components with your Plasma Television's remote control in TV mode.

⑫ **RS232C Input**
For use with third party home Audio/Video control systems which are commercially available. Please see your dealer regarding these "non Hitachi" home control systems (see page 79 to activate this input).

⑬ **IEEE1394**
These jacks provide a digital interface for your external digital devices, such as a Digital VCR (D-VHS or Set-Top-Box) by means of a single cable (see page 20). When using IEEE1394 connections, you enable video and audio digital data exchange between a compatible device. This connection also enables you to control basic equipment functions (such as VCR play, rewind, fast forward, stop, etc.) from your TV On-Screen Display.

⑭ **Subwoofer Out**
Connect this SUB WOOFER OUT output to the external audio component input using the sub woofer cable provided.



Sub-woofer cable (RCA Type)

⑮ **To AVC**
Connect the Monitor Connection cable from the AVC center's "TO MONITOR" to these connectors ("FROM AVC").

⑯ **Upgrade Card**
This card slot is for future software upgrades. Hitachi will notify you if a software upgrade is required for your TV. In order to receive written notification, please complete and return your warranty card.

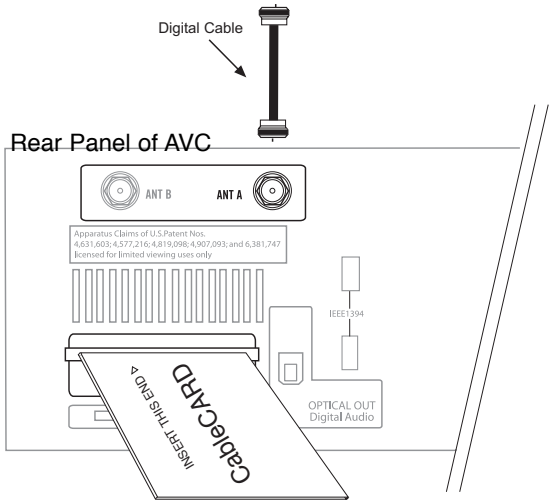
⑰ **To Power Swivel Connector**
Connects to the Power Swivel Table Top Stand.
The stand (TTB55) is optional (see page 4).

REAR PANEL JACKS

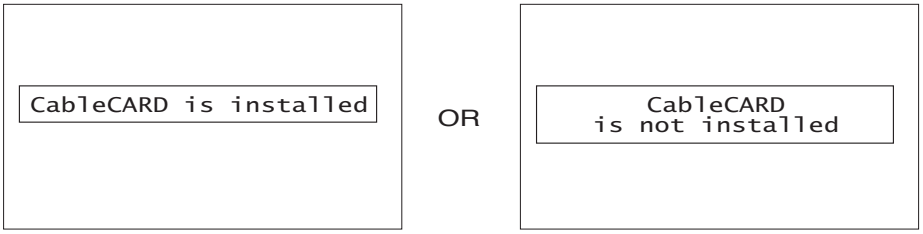
⑱ CableCARD Slot

This slot is for the CableCARD that will be provided by your local cable operator to gain access to chosen cable channels. The CableCARD will allow you to tune digital and high definition cable channels. Please call your local cable operator if this service is available before requesting a CableCARD (also known as Point of Deployment (POD) module).

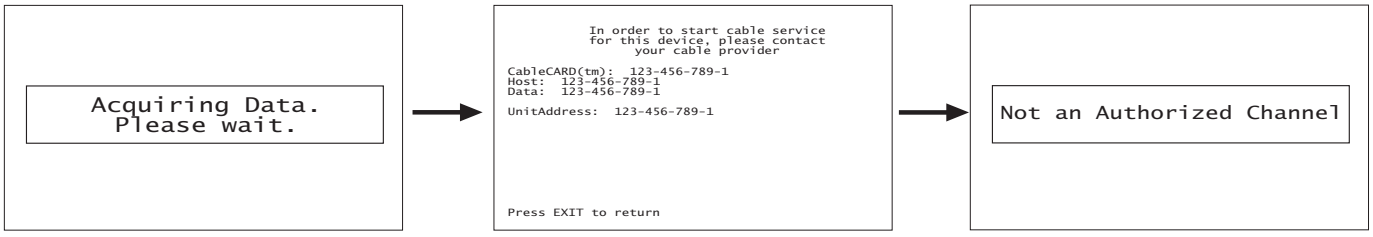
Connect a coaxial cable to ANT A terminal of the Rear Panel Jacks.
Insert the CableCARD into the slot (Top of card should be facing up as shown).



If the CableCARD is properly installed or not installed, the TV will display the following respective screens.



After the CableCARD is installed, wait until the second screen below appears. The third screen below will appear if a channel is not authorized for viewing. Press the EXIT button to exit the second screen.

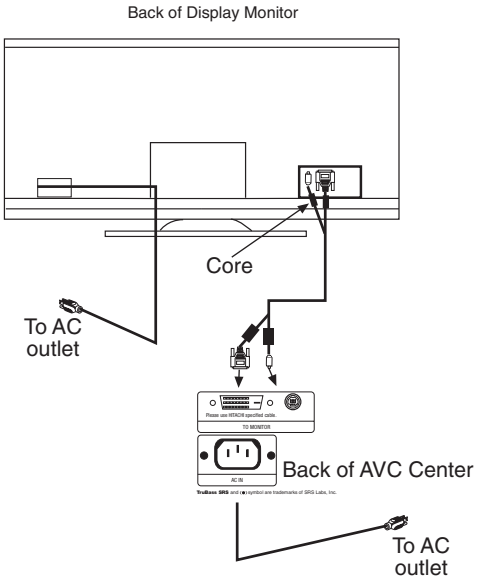


Please take note of all information on the screen (you will provide this information to your cable operator). Call your cable operator and give them the information from the card to start your cable service.

NOTES:
1. A digital cable subscription is required.
2. Antenna B will not be available when CableCARD is inserted.
3. Do not insert a PCMCIA card into the CableCARD slot.
4. Please see pages 66-67 for additional CableCARD information.

CONNECTING PLASMA DISPLAY MONITOR TO AVC BOX

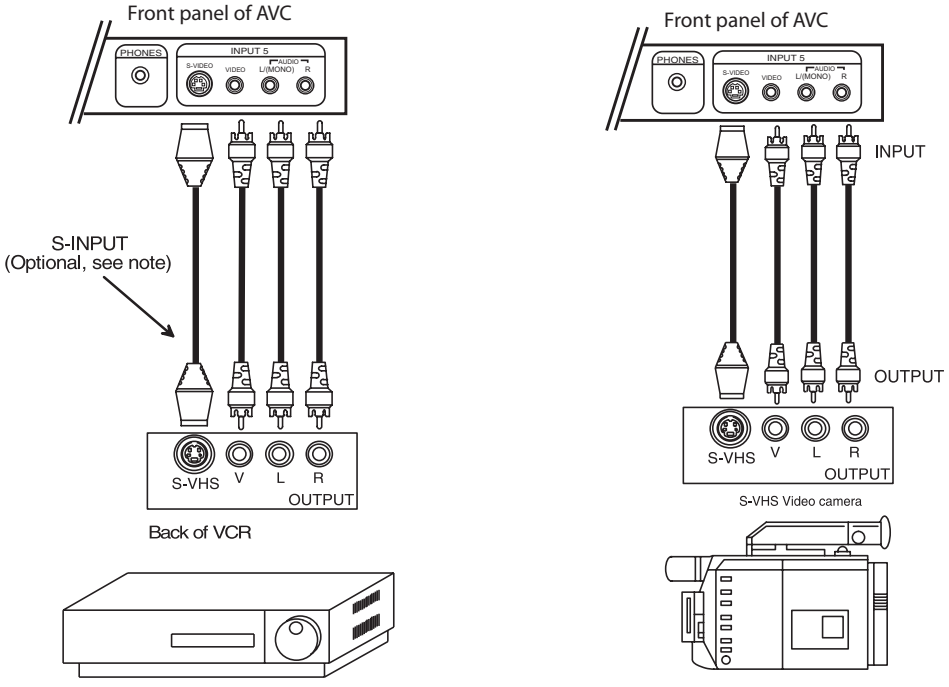
1. From the owner's accessory you will find the Monitor Connector cable.
2. Firmly, and securely insert the Monitor Connection Cable to the rear panel of the AVC box "TO MONITOR" connectors.
3. Insert the other ends of the Monitor Connection Cable to the display monitor rear panel "FROM AVC" connectors.



NOTE: The Display Monitor and the AVC Center have their own AC Power. Both AC cords must be completely plugged in to the AVC Center and the display monitor, then plug them in to the AC outlets.

CONNECTING EXTERNAL VIDEO SOURCES

The front panel jacks are provided as a convenience to allow you to easily connect a camcorder or VCR as shown in the following examples:



NOTES:
1. Completely insert connection cord plugs when connecting to front panel jacks. If you do not, the played back picture may be abnormal.
2. If you have a S-VHS VCR, use the S-INPUT cable in place of the standard video cable.
3. If you have a mono VCR, insert the audio cable into the left audio jack of your AVC box.
4. S-VIDEO input takes priority over VIDEO input.
5. If you have a VHS or 8mm camcorder, use the S-VIDEO cable in place of the VIDEO cable.

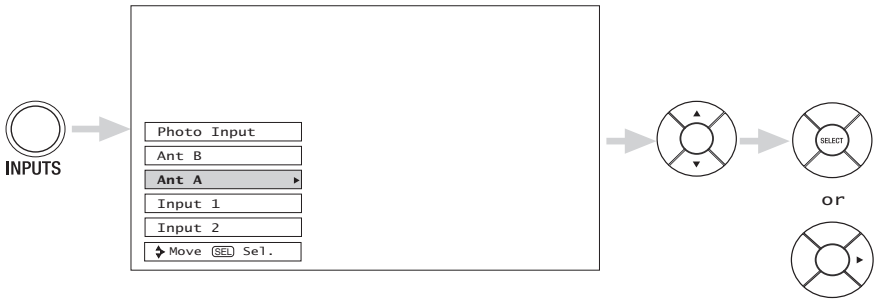
CONNECTING EXTERNAL VIDEO SOURCES

The exact arrangement you use to connect the VCR, camcorder, laserdisc player, DVD player, or HDTV Set Top Box to your Plasma TV is dependent on the model and features of each component. Check the owner's manual of each component for the location of video and audio inputs and outputs.

The following connection diagrams are offered as suggestions. However, you may need to modify them to accommodate your particular assortment of components and features. For best performance, video and audio cables should be made from coaxial shielded wire.

Before Operating External Video Source

Connect an external source to one of the INPUT terminals, then press the INPUTS button to show the INPUTS menu. Use the CURSOR PAD (▲ and ▼) to select the Antenna or Input of your choice. Then press the SELECT button or the CURSOR PAD ▶ to confirm your choice (see page 33).



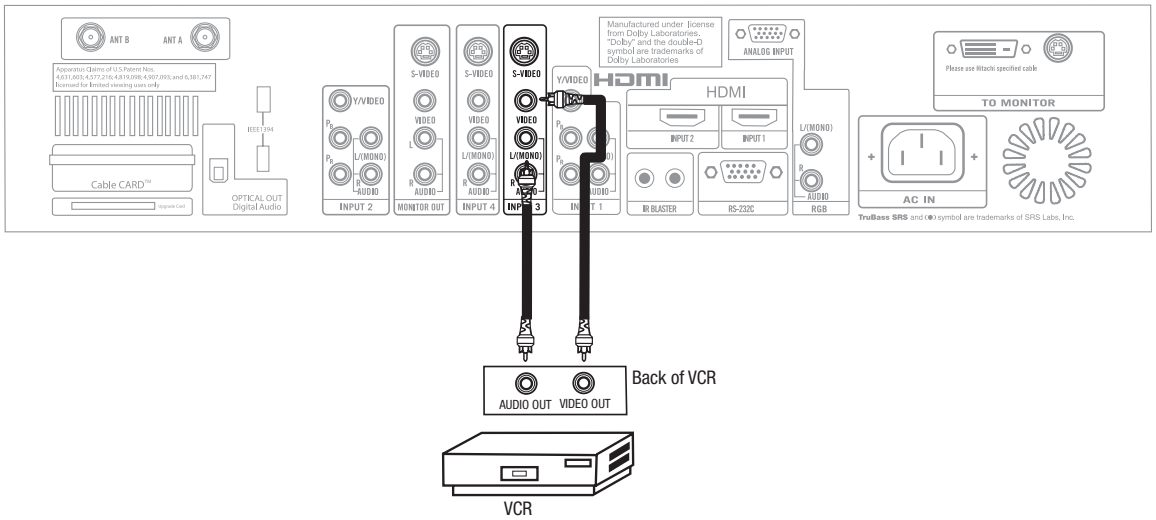
CONNECTING A MONAURAL AUDIO SOURCE TO INPUT1~INPUT5

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the AVC Center below.

2. Connect the cable from the AUDIO OUT of the VCR or the laserdisc player to the INPUT (MONO)/L(AUDIO) jack.

3. Press the INPUTS button, then select INPUT 3 from the INPUTS menu to view the program from the VCR or the laserdisc player. The VIDEO label disappears automatically after approximately four seconds.

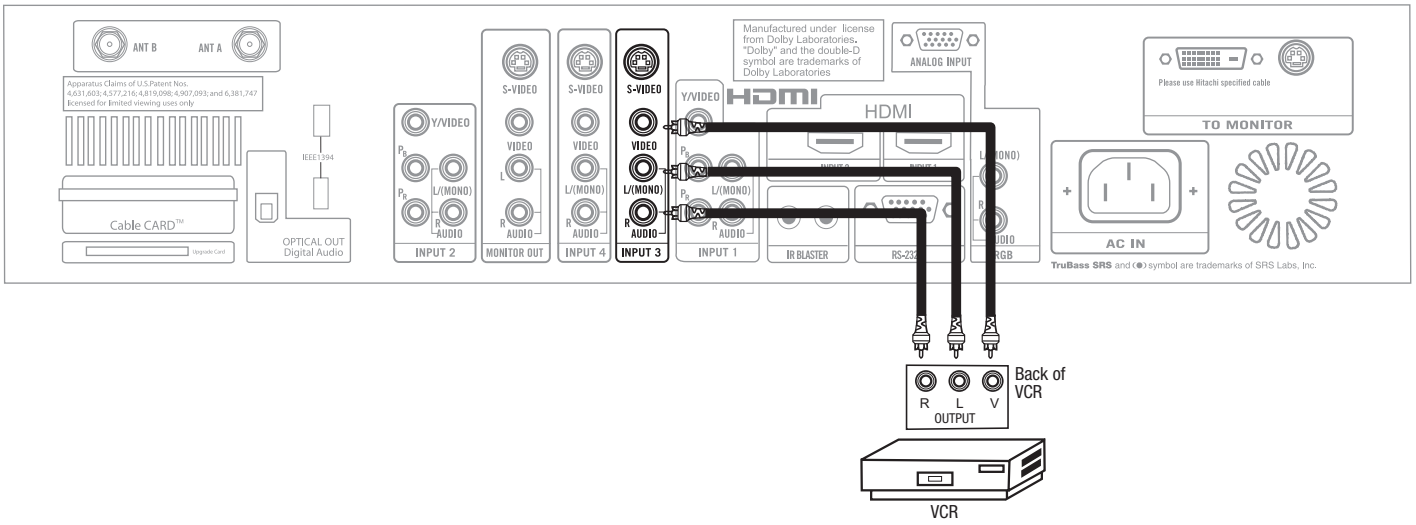
4. Select Ant A or B from the INPUTS menu to return to the previous channel.



CONNECTING EXTERNAL VIDEO SOURCES

CONNECTING A STEREO VCR OR STEREO LASERDISC PLAYER

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the AVC Center below.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the INPUTS button, then select INPUT 3 from the INPUTS menu to view the program from the VCR or laserdisc player. The VIDEO label disappears automatically after approximately four seconds.
5. Select ANT A or B from the INPUTS menu to return to the previous channel.



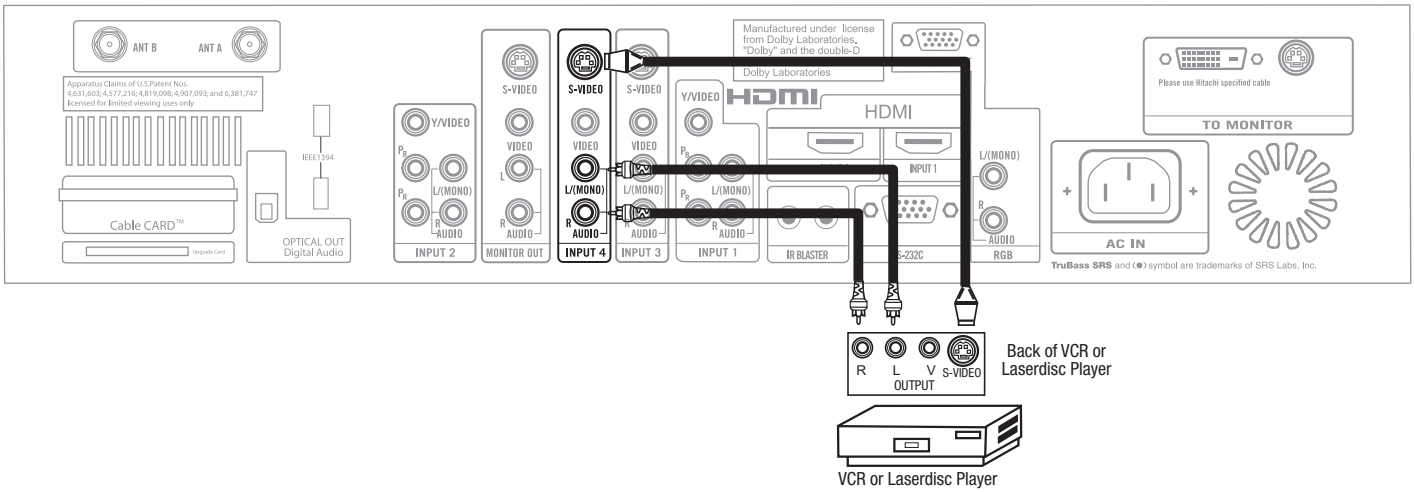
NOTES:

1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output (INPUT: 4 in example on page 26). Refer to your VCR operating guide for more information on line input-output connections.

CONNECTING EXTERNAL VIDEO SOURCES

CONNECTING S-VIDEO VCR OR LASERDISC PLAYER

1. Connect the cable from the S-VIDEO OUT of the S-VHS VCR or the laserdisc player to the INPUT (S-VIDEO) jack, as shown on the AVC Center below.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.
4. Press the INPUTS button, then select INPUT 4 from the INPUTS menu to view the program from the VCR or laserdisc player. The VIDEO label disappears automatically after approximately four seconds.
5. Select ANT A or B from the INPUTS menu to return to the previous channel.



NOTES:

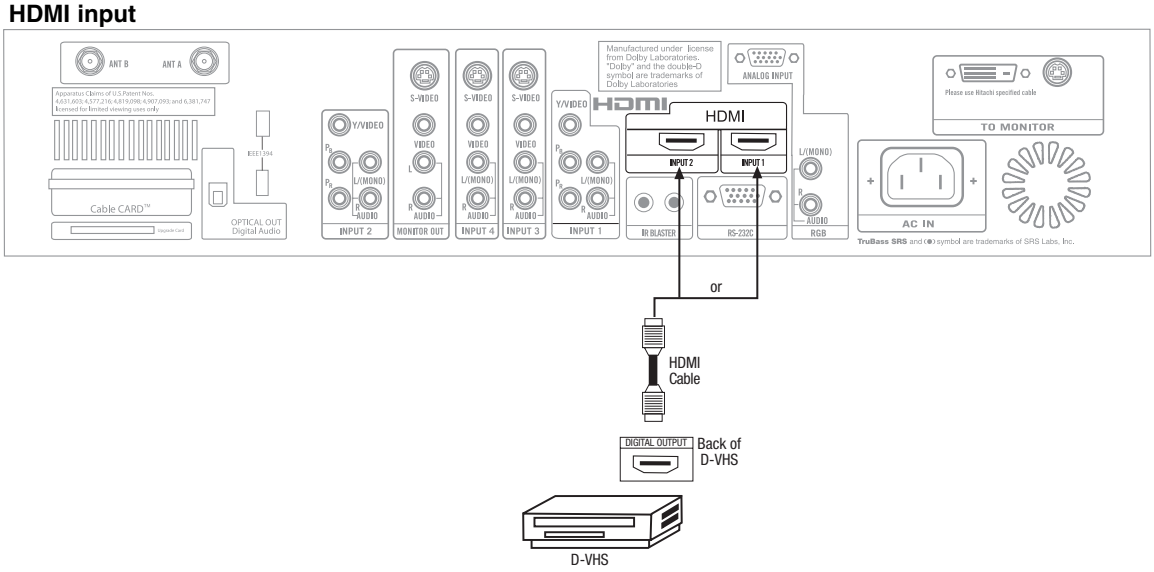
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output (INPUT: 4 in example on page 26). Refer to your VCR operating guide for more information on line input-output connections.

CONNECTING EXTERNAL VIDEO SOURCES

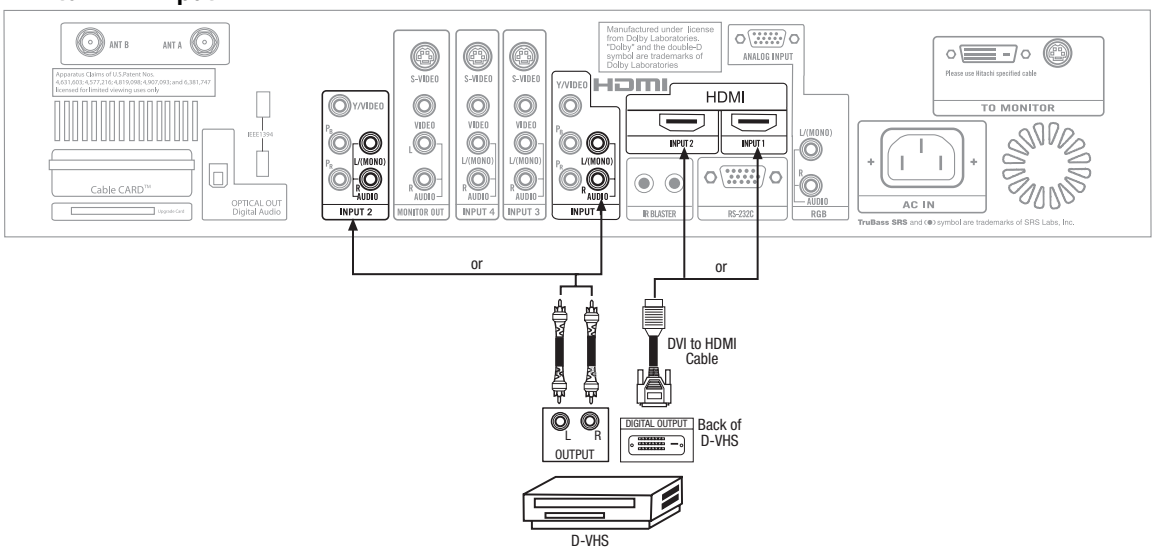
CONNECTING A COMPONENT SOURCE WITH HDMI or DVI CAPABILITY TO INPUT 1 or INPUT 2

1. Connect the HDMI or DVI to HDMI connection cable from the output of the HDTV set top box or DVD player to the HDMI input as shown on the AVC Center below.
2. With DVI output, connect the cable from the AUDIO OUT R of the HDTV set top box or DVD player to the INPUT (AUDIO/R) jack.
3. With DVI output, connect the cable from the AUDIO OUT L of the HDTV set top box or DVD player to the INPUT (AUDIO/L) jack.
4. Press the INPUTS button, then select INPUTS 1 or 2 to view the program from the HDTV set top box or DVD player. The VIDEO OSD label disappears automatically after approximately four seconds.
5. Select ANT A or B from the INPUTS menu to return to the previous channel.

HDMI input



DVI to HDMI Input



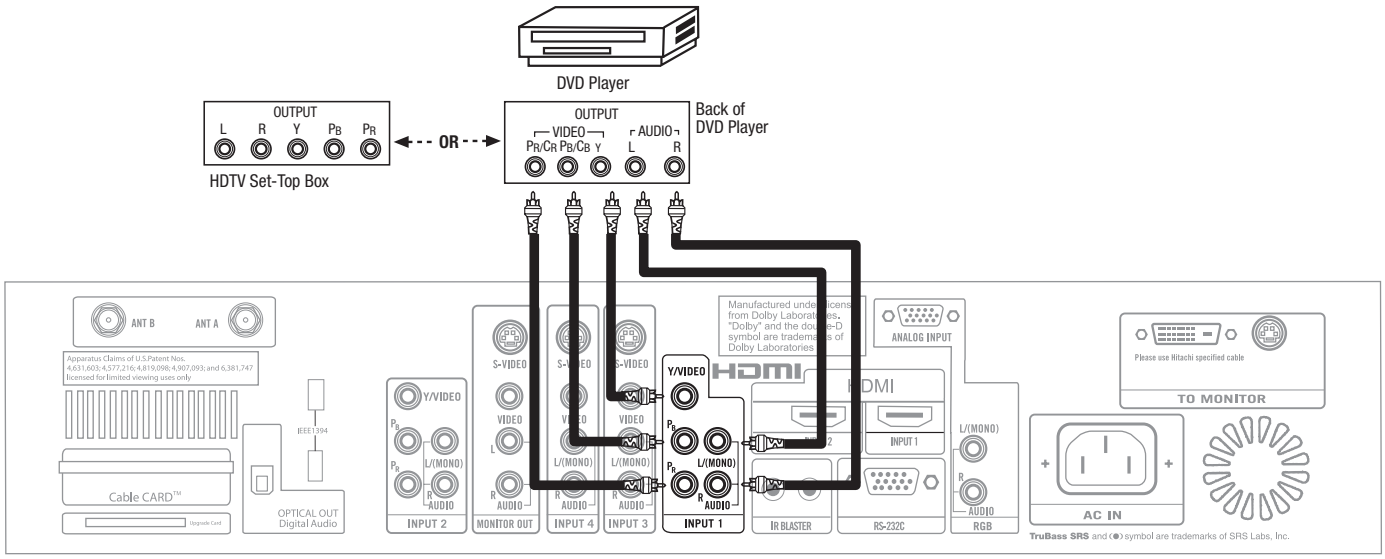
NOTES:

1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. The HDMI input on INPUT 1 or 2 contains the copy protection system called High-bandwidth Digital Content Protection (HDCP). HDCP is a cryptographic system that encrypts video signals when using HDMI connections to prevent illegal copying of video contents.
3. HDMI is not a “NETWORK” technology. It establishes a one-way point-to-point connection for delivery of uncompressed video to a display.
4. The connected digital output device controls the HDMI interface so proper set-up of device user settings determines final video appearance.

CONNECTING EXTERNAL VIDEO SOURCES

CONNECTING A STEREO LASERDISC/DVD PLAYER OR HDTV SET TOP BOX TO INPUT 1 OR 2 COMPONENT: Y-P_BP_R.

1. Connect the cable from the Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (Y) jack, as shown on the AVC Center below.
2. Connect the cable from the P_B/C_B OUT or B-Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT ($P_{B)}$ jack.
3. Connect the cable from the P_R/C_R OUT or R-Y OUT of the Laserdisc/DVD player or HDTV set top box to the INPUT (P_R) jack.
4. Connect the cable from the AUDIO OUT R of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/R) jack.
5. Connect the cable from the AUDIO OUT L of the Laserdisc/DVD player or HDTV set top box to the INPUT (AUDIO/L) jack.
6. Press the INPUTS button, then select INPUT 1 or 2 from the INPUTS menu to view the program from the Laserdisc/DVD player or HDTV set top box. The VIDEO label disappears automatically after approximately four seconds.
7. Select ANT A or B to return to the previous channel.



NOTE:
1. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
2. See page 27 for tips on REAR PANEL CONNECTIONS.

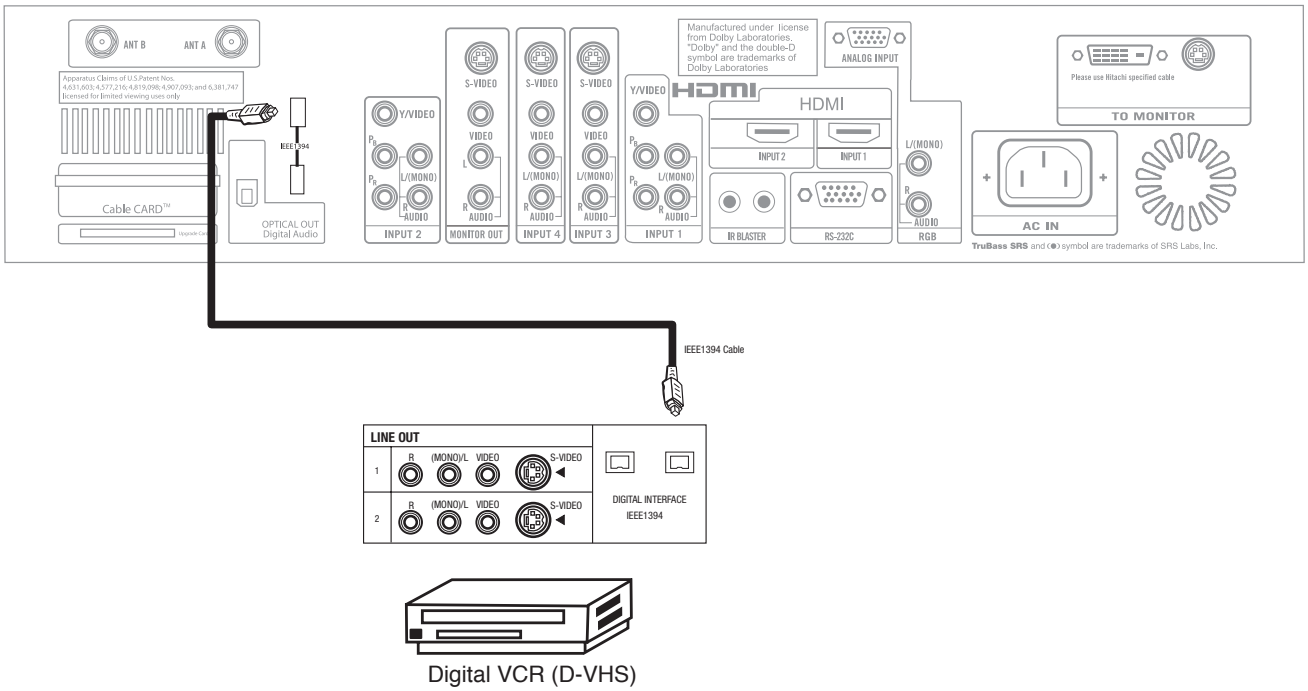
CONNECTING EXTERNAL VIDEO SOURCES

CONNECTING A COMPONENT SOURCE WITH DIGITAL INTERFACE CAPABILITY TO IEEE1394 TERMINALS

1. Connect the IEEE1394 cable from the output of the component with IEEE1394 capability, such as a Set-Top-Box or Digital VCR, to the IEEE1394 input terminals shown on the AVC Center below. IEEE 1394 allows the plasma television and the external device to communicate with one another. When using IEEE1394 connections, you enable video and audio digital data exchange between a compatible device. This connection also enables you to control basic equipment functions (such as VCR play, rewind, fast forward, stop, etc.) from your TV On-Screen Display.

2. Press the INPUTS button on the Remote Control.

3. Select the IEEE1394 option (see page 38).



Digital VCR (D-VHS)

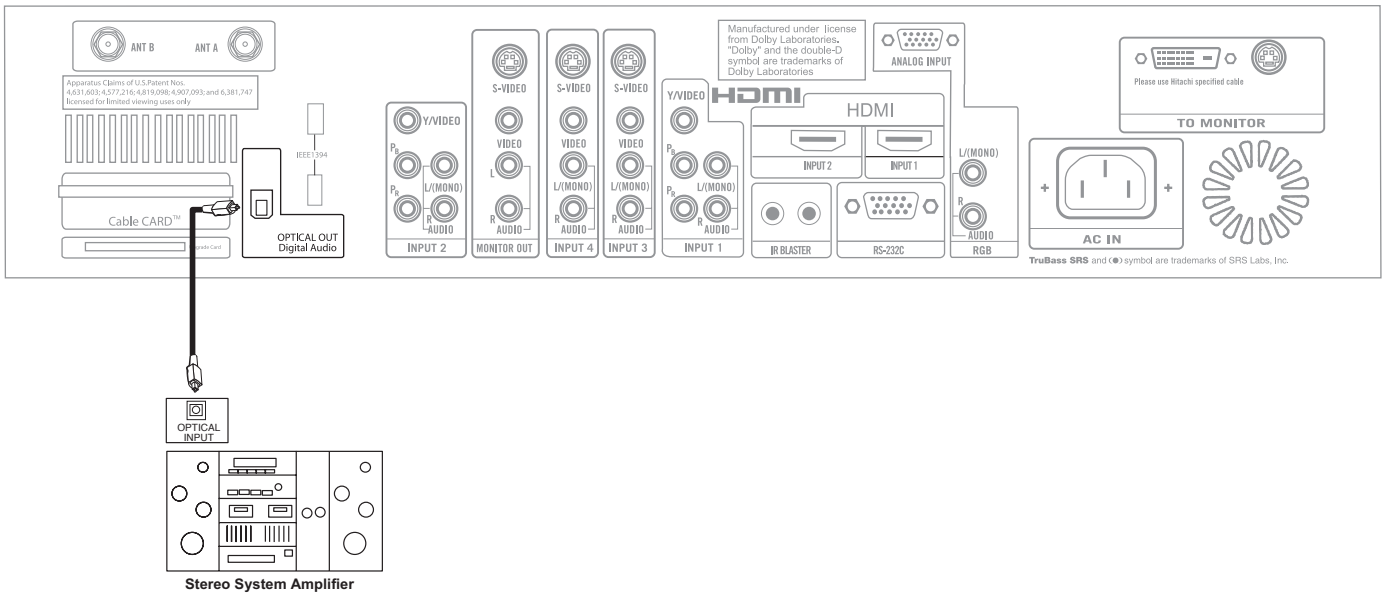
NOTES:

1. To quickly enter IEEE1394 menu, press the AV NET button on the remote control and then select the IEEE1394 device.
2. This Plasma TV's IEEE1394 connection is not compatible with a DV camcorder (Digital Video camcorder) and a PC.
3. With IEEE1394 connection, video and audio will be received by the TV. It will enable you to control the D-VHS from the TV IEEE1394 menu (see page 38).
4. The IEEE1394 interface contains the copy protection standard called 5C or Digital Transmission Content Protection (DTCP).
5. See page 27 for tips on Rear Panel Connections.

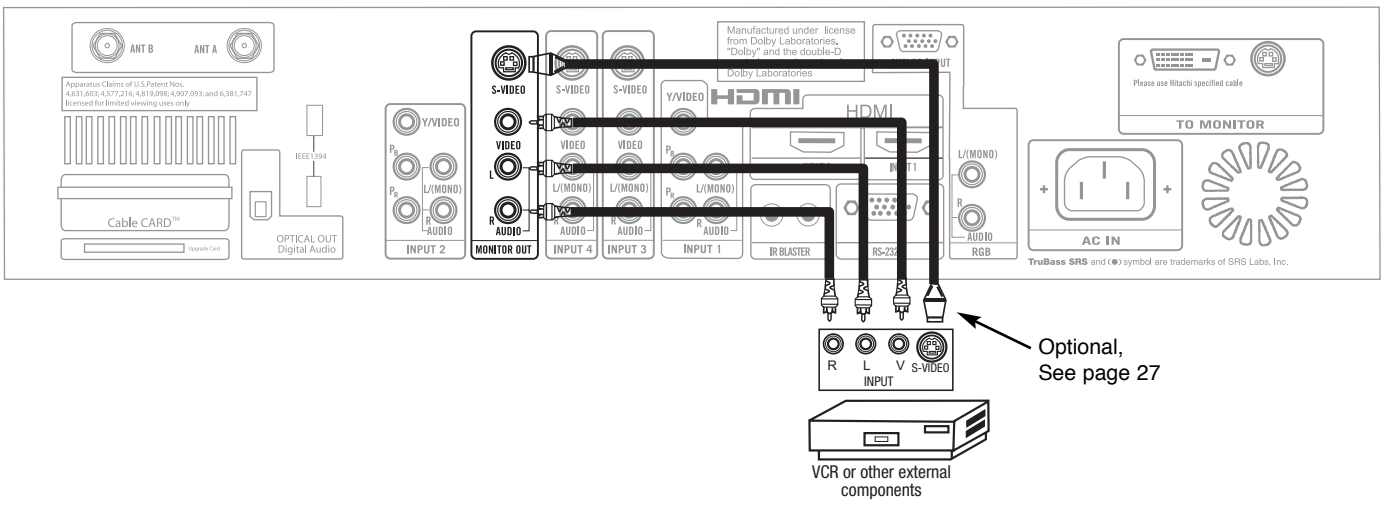
CONNECTING EXTERNAL AUDIO/VIDEO DEVICES

CONNECTING EXTERNAL AUDIO AMPLIFIER

To monitor the audio level of the Plasma TV to an external audio amplifier, connect the system as shown below. The “OPTICAL OUT” from the AVC center is a fixed output. The Volume of the amplifier is controlled by the amplifier, not by the Plasma Television. The OPTICAL OUT terminal outputs all audio sources with Optical IN capability.



The MONITOR OUT terminal outputs video and audio of ANT A/B and INPUTS 1, 2, 3, 4 and 5. It does not output component video, HDMI or RGB.



CONNECTING AV NETWORK

Your Hitachi Plasma Television is equipped with an AV Network feature. This feature helps to control your external Audio/Video equipment (VCR, Set Top Box, DVD, etc.). Once this is setup, it allows your IR Mouse connector to control your equipment using your Hitachi Plasma TV Remote Control. You can use your Hitachi remote control to control the Audio/Video equipment command without the equipment's remote control.

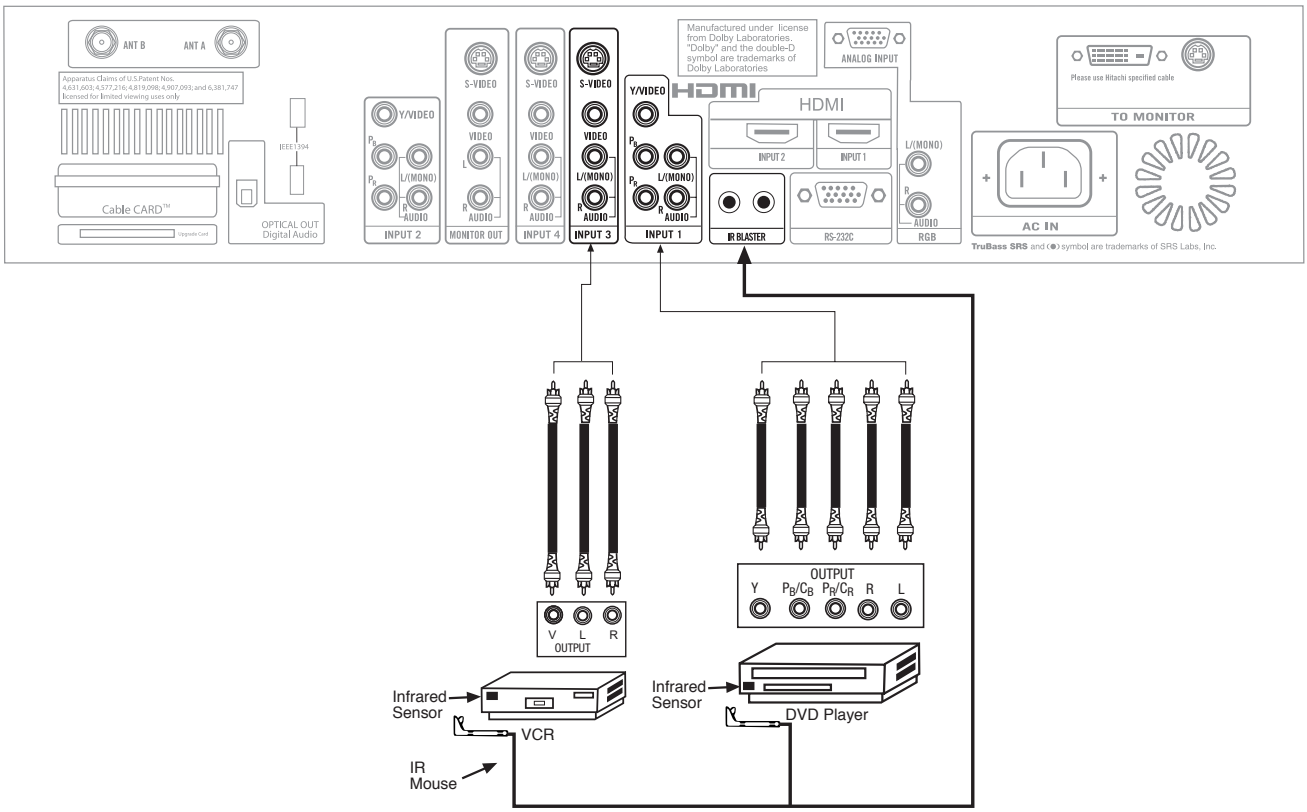
The Plasma Television AVC Center has 2 IR BLASTER jacks. Each IR Mouse cable can connect up to 2 external Audio/Video components. Therefore, you can connect the Plasma Television with up to four components. Please see the following example of an AV Network setup between your Hitachi Plasma Television and external Audio/Video equipment (VCR and DVD Player).

CONNECTING EXTERNAL AUDIO/VIDEO COMPONENTS TO IR BLASTER FOR AV NETWORK

1. Connect your external Audio/Video components to the AVC Center shown on pages 15~21.

2. Connect the IR Mouse cable to the IR BLASTER output of the AVC Center.

3. Place the IR mouse in front of the infrared sensor of the external components you wish to control.



4. Follow the Setup procedure on pages 23-25.

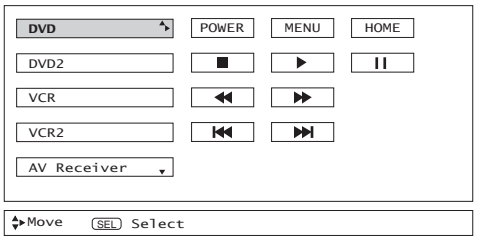
NOTES:
1. The AVC Center has two IR BLASTER outputs which can control up to a total of four external components.
2. The IR Mouse must be placed in front of the external components infrared sensor for the AV Network to work.
3. The correct codes must be entered for each of the Audio/Video components for the AV Network to function properly.
4. Audio/Video component codes for AV network are on page 25.

AV NETWORK SETUP WIZARD

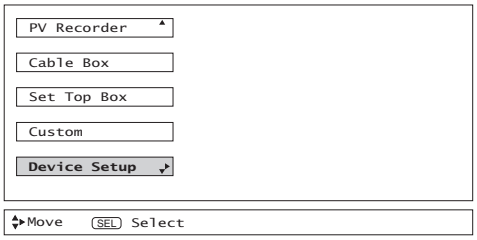
SETUP PROCEDURE USING AV NETWORK DEVICE CODES:

A DVD Setup example is shown below. Setup of DVD2, VCR, VCR2, PV Recorder, Cable Box and Set-Top-Box follows this same procedure. If your device is not listed or the device codes not work after following the setup procedure, please refer to the AV NET Learning wizard procedure on pages 33-34.

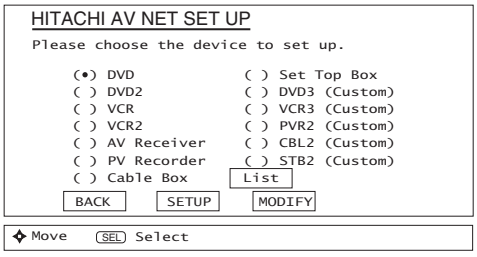
1. Press the A/V Net button on the remote control.



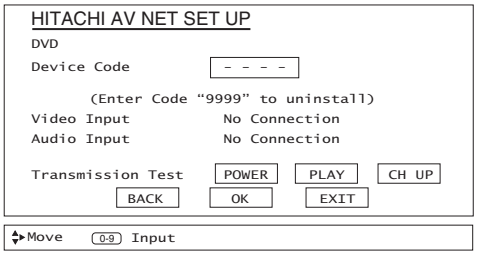
2. Use CURSOR PADS ▲ or ▼ to highlight Device Setup.
3. Press the SELECT button or CURSOR PAD ▶ on the remote control and the device selection screen appears.



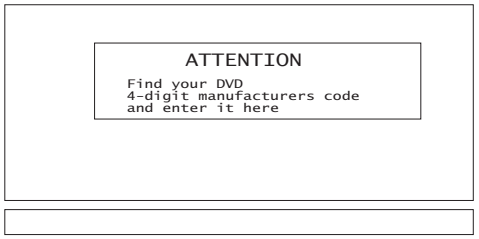
4. Use the CURSOR PADS ▲ or ▼ to choose DVD and press the SELECT button on the remote control.
5. The Setup button on the bottom of the screen becomes highlighted. Press the SELECT button on the remote control to enter the setup screen.



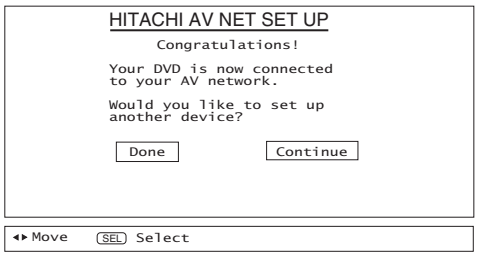
6. Using the remote, enter the four digit Device Code for your equipment, found on page 25.
7. Use the CURSOR PAD ▼ to select Video Input. Press the CURSOR PADS ◀ or ▶ to set the INPUT to which your device is connected.
8. Repeat step 7 for Audio Input. If the DVD is connected to the TV, select “Using TV”. If the DVD is connected to an external amplifier, select “no connection”.
9. Press CURSOR PAD ▼ to select Transmission Test. Press the CURSOR PADS ◀ or ▶ to select Power, Play, or CH UP softkeys, before pressing the SELECT button to perform a Transmission Test of the softkey selected. If the device responds, then it is properly set up. Select OK. (If the Transmission Test failed, try another code).



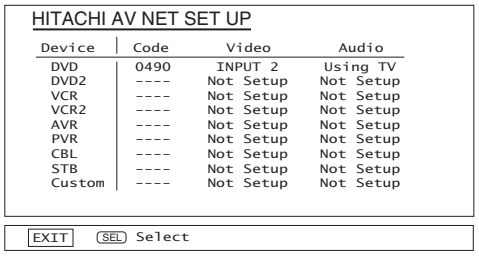
10. If “OK” was selected, and the 4 digit code was invalid, the screen below appears, then goes back to the Device Code entry screen.



11. Repeat Device Setup procedure until the screen below appears.
12. Select CONTINUE to setup another device.



13. Select DONE to finish and the screen below appears to show the device(s) which has been set-up.

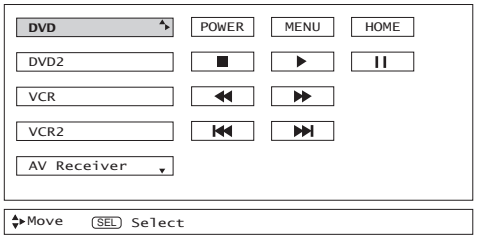

HITACHI AV NET SET UP
Device | Code | Video | Audio
DVD | 0490 | INPUT 2 | Using TV
DVD2 | ---- | Not Setup | Not Setup
VCR | ---- | Not Setup | Not Setup
VCR2 | ---- | Not Setup | Not Setup
AVR | ---- | Not Setup | Not Setup
PVR | ---- | Not Setup | Not Setup
CBL | ---- | Not Setup | Not Setup
STB | ---- | Not Setup | Not Setup
Custom | ---- | Not Setup | Not Setup
EXIT
SEL Select

14. Select EXIT to quit.

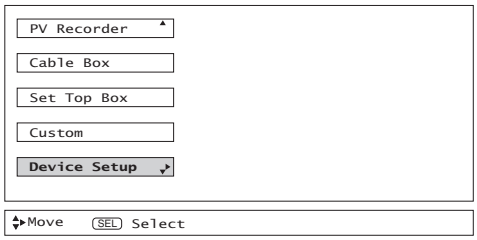
SETUP PROCEDURE USING AV NETWORK DEVICE CODES:

An AV Receiver Setup example is shown below. If your device is not listed or the device codes not work after following the setup procedure, please refer to the AV NET Learning wizard procedure on pages 33-34.

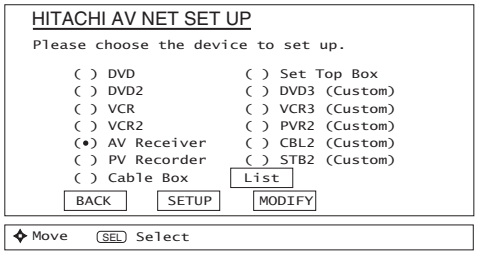
1. Press the A/V Net button on the remote control.



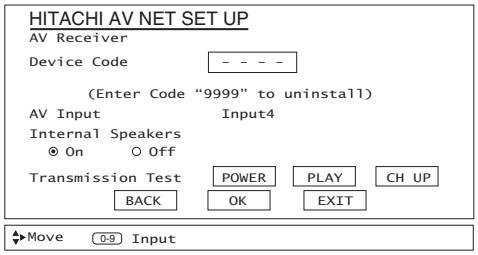
2. Use CURSOR PADS ▲ or ▼ to highlight Device Setup.
3. Press the SELECT button or CURSOR PADS ▶ on the remote control and the device selection screen appears.



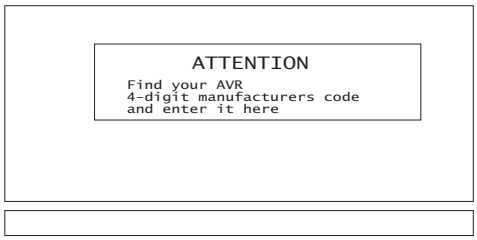
4. Use the CURSOR PADS ▲ or ▼ to choose AV Receiver and press the SELECT button on the remote control.
5. The Setup button on the bottom of the screen becomes highlighted. Press the SELECT button on the remote control to enter the setup screen.



6. Using the remote, enter the four digit Device Code for your equipment, found on page 25.
7. Use the CURSOR PAD ▼ to select AV Input. Press the CURSOR PAD ◀ or ▶ to set the INPUT to which your device is connected.
8. Use the CURSOR PAD ▼ to select Internal Speakers. Speakers to ON or OFF, then press SELECT to set the option chosen.
9. Press CURSOR PAD ▼ to select Transmission Test. Press the CURSOR PADS ◀ or ▶ to select Power, Play, or CH UP softkeys, before pressing the SELECT button to perform a Transmission Test of the softkey selected. If the device responds, then it is properly set up. Select OK. (If the Transmission Test failed, try another code).



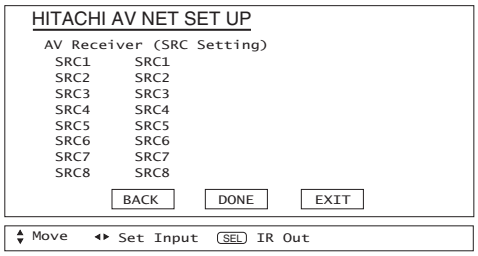
10. If "OK" was selected, and the 4 digit code was invalid, the screen below appears, then goes back to the Device Code entry screen.



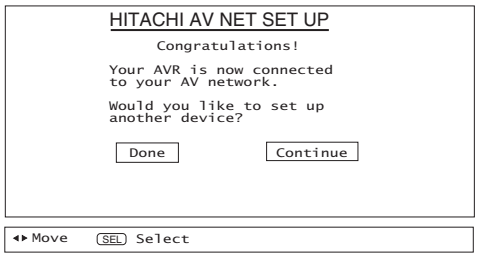
11. Repeat Device Setup procedure until the Source (SRC) Setting Screen appears.

This screen allows you to assign a label for each Source (SRC1 to SRC8) connection on the AV Receiver. Depending on the number of source connections to the AV Receiver, some sources may not be available.

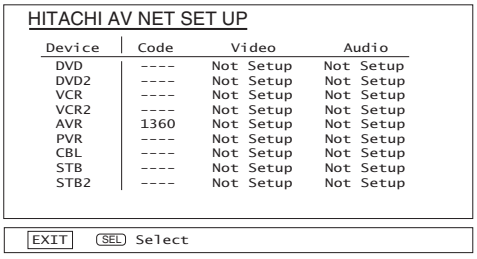
12. To label your sources, use CURSOR PAD ▲ or ▼ to highlight SRC1.
13. Use CURSOR PAD ◀ or ▶ to select the Source (DVD, DVD2, VCR, VCR2, PVR, CBL, STB, TV or Custom). If SRC1 is active, video and audio will be available depending on the connections.
14. Repeat for SRC2 to SRC8 if applicable.
15. Select DONE to continue.



16. Select CONTINUE to setup another device.



17. Select DONE to finish and the screen below appears to show the device(s) which has been set-up.


HITACHI AV NET SET UP
Device Code Video Audio
DVD ---- Not Setup Not Setup
DVD2 ---- Not Setup Not Setup
VCR ---- Not Setup Not Setup
VCR2 ---- Not Setup Not Setup
AVR 1360 Not Setup Not Setup
PVR ---- Not Setup Not Setup
CBL ---- Not Setup Not Setup
STB ---- Not Setup Not Setup
STB2 ---- Not Setup Not Setup
EXIT
SEL Select

18. Select EXIT to quit.

AUDIO/VIDEO CODES FOR AV NETWORK (not for remote control)

VCR BRAND . . . . . CODE
Admiral 0048, 0209
Adventura 0000
Aiko 0278
Aiwa 0000, 0037
Akai 0041
America Action 0278
American High 0035
Asha 0240
Audiovox 0037, 0278
Beaumark 0240
Bell & Howell 0104
Broksonic 0121, 0184, 0002, 0209, 0479, 1479, 0278
CCE 0072, 0278
Calix 0037
Canon 0035
Carver 0081
Cineral 0278
Citizen 0278, 0037, 1278
Colt 0072
Craig 0037, 0072, 0047, 0240
Curtis Mathes 0035, 0041, 0060, 0162, 0760, 1035
Cybernex 0240
Daewoo 0278, 1278, 0045
Denon 0042
Dynatech 0000
Electrohome 0037
Electrophonic 0037
Emerex 0032
Emerson 0184, 0002, 0209, 0121, 0000, 0037, 0043
Fisher 0104, 0047
Fuji 0033, 0035
Funai 0000
GE 0035, 0060, 0240, 0760, 0807, 1035, 1060
Garrard 0000
Go Video 0432
GoldStar 0037, 0038, 1237
Gradiente 0000
HI-Q 0047
Harley Davidson 0000
Harman/Kardon 0038, 0081
Harwood 0072
Hitachi 0000, 0041, 0042
Hughes Network Systems 0042
JVC 0067, 0041
Jensen 0041
KEC 0037, 0278
KLH 0072
Kenwood 0041, 0067, 0038
Kodak 0035, 0037
LXI 0037
Lloyd's 0000
Logik 0072
MEI 0035
MGA 0043, 0240
MGN Technology 0240
MTC 0000, 0240
Magnasonic 1278
Magnavox 0035, 0081, 0563, 0000, 0039, 0149, 1781
Magnin 0240
Marantz 0081, 0035
Marta 0037
Matsushita 0035, 0162, 0454
Memorex 0047, 0037, 0104, 0209, 0454,0048, 0039, 0240, 0000, 0479, 1037, 1162, 1237, 1262
Minolta 0042
Mitsubishi 0043, 0067
Motorola 0035, 0048
Multitech 0000, 0072
NEC 0038, 0041, 0067, 0104
Nikko 0037
Noblex 0240
Olympus 0035
Optimus 1062, 0162, 0037, 0048, 0104, 0432, 0454, 1048, 1162, 1262
Orion 0184, 0209, 0002, 0479, 1479
Panasonic 1062, 0035, 0225, 0454, 0616, 1035, 1162, 1262
Penney 0035, 0037, 0240, 0042, 0038, 1035, 1237
Pentax 0042
Philco 0035, 0209, 0479
Philips 0081, 0035, 0618, 1081, 1181
Pilot 0037
Pioneer 0067
Polk Audio 0081
Profitronic 0240
Proscan 0060, 0760, 1060
Protec 0072
Pulsar 0039
Quasar 0035, 0162, 0454, 1035, 1162
RCA 0060, 0240, 0042, 0149, 0760, 1035, 1060
Radio Shack 0000, 1037
Radix 0037
Randex 0037
Realistic 0035, 0037, 0048, 0047, 0000, 0104
ReplayTV 0614, 0616
Runco 0039
STS 0042
Samsung 0045, 0240
Sanky 0039, 0048
Sansui 0000, 0067, 0209, 0041, 0479, 1479
Sanyo 0047, 0240, 0104
Scott 0184, 0045, 0121, 0043
Sears . 0035, 0037, 0047, 0000, 0042, 0104, 1237
Semp 0045
Sharp 0048, 0848
Shintom 0072
Shogun 0240
Singer 0072
Sonic Blue 0614, 0616
Sony 0035, 0032, 0000, 0033, 0636, 1032, 1232
Sylvania 0035, 0081, 0000, 0043, 1781
Symphonic 0000
TMK 0240
Tatung 0041
Teac 0000, 0041
Technics 0035, 0162
Teknika 0000, 0035, 0037
Thomas 0000
Tivo 0618, 0636
Toshiba 0045, 0043
Totevision 0037, 0240
Unitech 0240
Vector 0045
Vector Research 0038
Video Concepts 0045
Videomagic 0037
Videosonic 0240
Wards 0060, 0035, 0048, 0047, 0081, 0240, 0000, 0042, 0072, 0149, 0760
White Westinghouse 0072, 1278, 0209
XR-1000 . . . . . 0072, 0000, 0035
Yamaha 0038
Zenith 0039, 0000, 0209, 0033, 0479, 1479, 0033, 0209, 0479

DVD BRAND . . . . . CODE
Aiwa 0641
Apex 0672, 0717, 0755, 0794, 0795, 0796, 0797, 0830
Audiologic 0736
B & K 0655, 0662
Blue Parade 0571
Brooksonic 0695
DVD2000 0521
Daewoo 0784
Denon 0490, 0634
Emerson 0591
Enterprise 0591
Fisher 0670
GE 0522, 0717, 0815
GPX 0769
Go Video 0715
Gradiente 0651
Greenhill 0717
Harman/Kardon 0582, 0702
Hitachi 0490, 0573, 0664
Hiteker 0672
JBL 0702
JVC 0623, 0558, 0867
KLH 0717
Kenwood 0490, 0534, 0682
Konka 0711, 0719, 0721
Koss 0651
Lasonic 0798
Magnavox 0503, 0675
Malata 0782
Marantz 0539
Microsoft 0522
Mintek 0717
Mitsubishi 0521
Nesa 0717
Onkyo 0627, 0503
Oritron 0651
Panasonic 0490, 1362, 0632
Philips 0503, 0539, 0646, 0854
Pioneer 0525, 0571, 0632
Polk Audio 0539
Princeton 0674
Proscan 0522
RCA 0522, 0571, 1022, 0717
Rowa 0823
Sampo 0698
Samsung 0573, 0820
Sansui 0695
Sanyo 0670
Sharp 0630
Sherwood 0633
Sony 0533
Sylvania 0675
Technics 0490
Techwood 0692
Theta Digital 0571
Toshiba 0503, 0695
Urban Concepts 0503
Yamaha 0490, 0545, 0539
Zenith 0591, 0503

CABLE BRAND . . . . . CODE
ABC 0003, 0008, 0014, 0017
Americast 0899
Bell & Howel 0014
Bell South 0899
Director 0476
General Instrument 0003, 0476, 0276, 0810
GoldStar 0144
Hamlin 0009, 0273
Jerrold 0476, 0003, 0276, 0012, 0014, 0810
Memorex 0000
Motorola 0476, 1106, 0276, 0810
Pace 0237
Panasonic 0107, 0000
Philips 0305, 0317
Pioneer 0144, 0533, 0877, 1877
Pulsar 0000
Quasar 0000
Regal 0273, 0279
Runco 0000
Samsung 0144
Scientific Atlanta 0877, 0008, 0017, 0477, 1877
Sony 1006
Starcom 0003
Supercable 0276
Tocom 0012
Torx 0003
Toshiba 0000
Zenith 0000, 0525, 0899

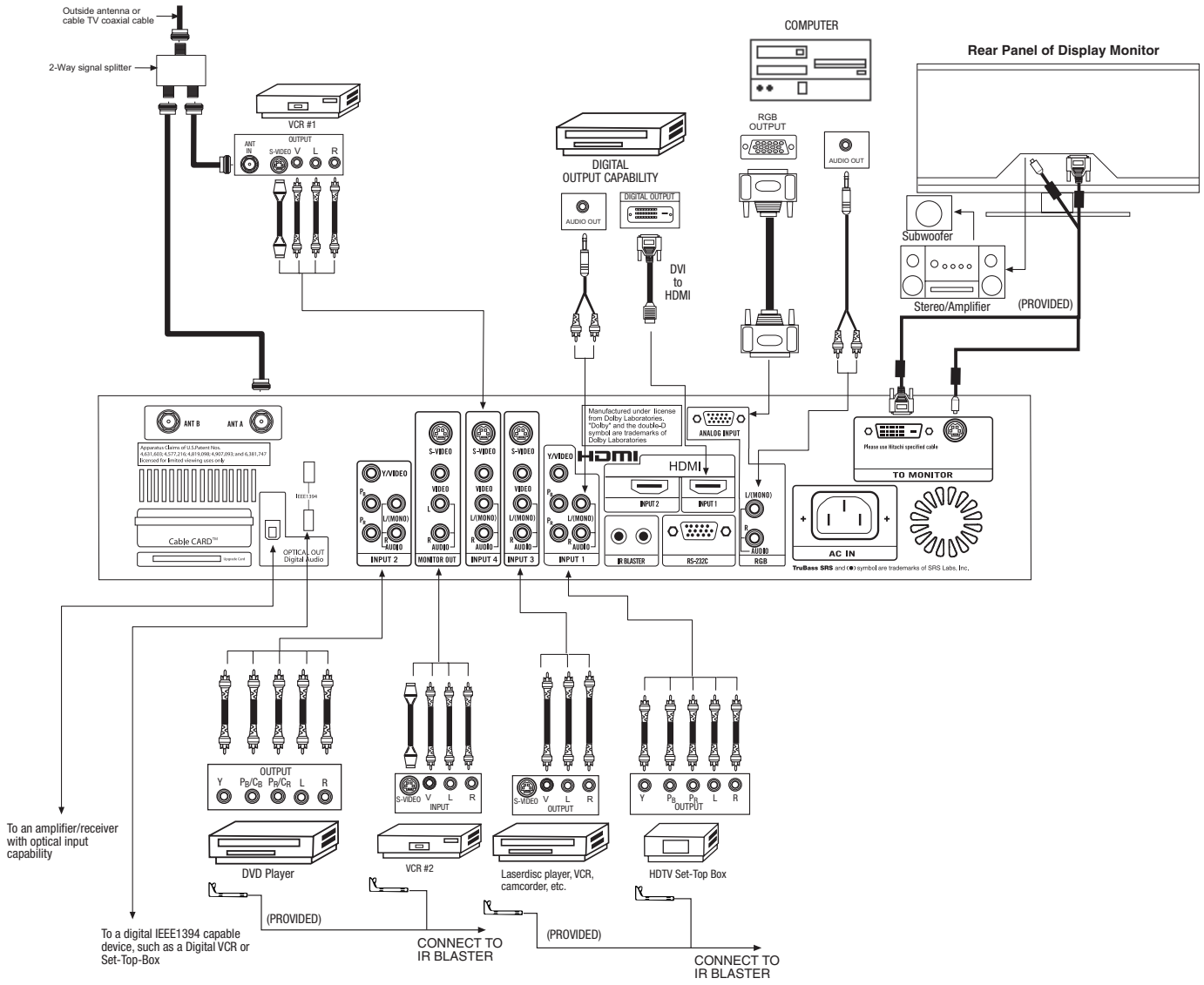
SATELLITE BRAND (Set-Top-Box) . . . . . CODE
AlphaStar 0772
Chapparral 0216
Crossdigital 1109
DishPro 1005, 0775
Echostar 1005, 0775
Expressvu 0775
GE 0566
GOI 0775
General Instrument 0869
HTS 0775
Hitachi 0819
Hughes Network Systems 1142, 0749, 1749
JVC 0775
Magnavox 0724, 0722
Memorex 0724
Mitsubishi 0749
Motorola 0869
Next Level 0869
Panasonic 0247, 0701
Paysat 0724
Philips 1142, 0749, 0724, 1076, 0722, 1749
Proscan 0392
RCA 0392, 0566, 0855, 0143
Radioshack 0869
SKY 0856
Samsung 1109
Sony 0639
Star Choice 0869
Toshiba 0749, 0790, 1749
Uniden 0724, 0722
Zenith 0856, 1856

AUDIO / RECEIVER / AV RECEIVER AMPLIFIER . . . . . CODE
ADC 0531
Adcom 0616
Aiwa 0010, 1089, 1405, 0121, 0158, 0404, 0189, 0405, 0406, 1321, 1388
Akai 0076, 0224
Alco 1390
Anam 1074, 1609
Apex Digital 1257
Arcam 1120
AudioSource 0351
Audiotronic 1189
Audiovox 1390
Bose 0674, 1229
Capetronic 0531
Carver 0351, 1089, 1189, 0008, 0042, 0189, 0269, 0360
Casio 0195
Cambridge Soundworks 0351
Celestion 1264
Clarinette 0195
Compaq 1136
Curtis Mathes 0080, 0300
Denon 0004, 0160, 0273, 0771, 1104, 1311, 1360
Emerson 0424
Fisher 0052, 0042, 0219, 0360
Fosgate 0259
GE 0078
GPX 1299
Garrard 0424, 0463
Glory Horse 1263
Harman/Kardon 0110, 0189 0477, 0891, 0892
Hewlett Packard 1181
Inkel 0062
JBL 0110, 0479, 1306
JVC 0073, 0074, 0331, 1263, 1374
Kenwood 0027,0042, 0077, 0186, 0313, 0314, 0569,1027, 1051, 1052, 1313, 1569, 1570
KLH 0351
Koss 0424, 1366
LXI 0181
LeftCoast 0892
Lexicon 1076
Linn 0189, 0269
Lloyd's 0195
Luxman 0165
MCS 0039, 0346
Magnavox 0325, 1089, 1189, 0128, 0189, 0195, 0269, 0391, 0531
Marantz 1089, 1189, 0039, 0128, 0189 0269, 0321, 0892
Modulaire 0195
Musicmagic 1089
Nakamichi 0321
NAD 0320
Nakamichi 0097, 0347
NEC 0235, 0264
Nikko 0376
Onkyo 0100, 0135, 0380, 0842, 1298
Optimus 1023, 0042, 0080, 0177, 0181, 0186,0219, 0300, 0395, 0531, 0670, 0738, 0801, 1074
Panasonic 1518, 0039, 0309, 0308, 0367, 0518, 0521, 1288, 1350
Paramount Pictures 0317, 0351
Parasound 0246
Penney 0195
Philips 1089, 1189, 1269, 0189, 0269, 0391, 0892, 1120, 1268, 1283
Pioneer 0013, 1023, 0014, 0080, 0150, 0244, 0300, 0531, 0630, 1343, 1384
Polk Audio 0189, 0269, 0892
Proscan 1254
Quasar 0039
RCA 1023, 1254, 0054, 0080, 0056, 0300, 0346, 0360, 0530, 0531, 1074, 1154, 1390, 1609
Radio Shack 1263
Realistic 0163, 0181, 0195, 0395
Samsung 1295
Sansui 0189, 0193, 0321, 0325, 0346, 1089
Sanyo 0219, 0801, 1251
Schneider 0376
Scott 0163, 0322
Sharp 1286, 0186
Sherwood 0062, 0491, 0502
Shure 0264
Sony 0010, 0158, 0168, 0220, 0474, 0576, 0689,1042, 1058, 1158, 1258, 1458
Soundesign 0078, 0211, 0376, 0670
SSI 0317
Stereophonics 1023
Sunfire 1313, 0313, 0314, 1052
Teac 0463, 0163, 1074
Technics 1308, 1309, 1518, 0039, 0208, 0308, 0309, 0518, 0521
Thorens 1189
Victor 0074, 0331
Wards 0013, 0014, 0054, 0078, 0080, 0158, 0189, 0211
Yamaha 0133, 0176, 0186, 0354, 1176
Yorx 0195, 0376
Zenith 0857

SET TOP BOX BRAND . . . . . CODE
Panasonic 1120
Pioneer 1010
Princeton 0113, 0295
Samsung 1190
Sensory Science 1126
Sharp 1010
Sony 0639

PERSONAL VIDEO RECORDER BRAND . CODE
Echostar 0775, 1005
Hughes 1142
Panasonic 0616
Philips 0618
Proscan 0392
ReplayTV 0614, 0616
SonicBlue 0614, 0616
Sony 0639, 0636
Tivo 0618, 0636

REAR PANEL CONNECTIONS



NOTE: Cables are optional, except when specified.

TIPS ON REAR PANEL CONNECTIONS

- S-VIDEO, YPbPR, IEEE 1394 or HDMI connections are provided for high performance laserdisc players, VCRs etc. that have this feature. Use these connections in place of the standard video connection if your device has this feature.
- If your device has only one audio output (mono sound), connect it to the left audio jack on (L/(MONO)) the AVC Center.
- Refer to the operating guide of your other electronic equipment for additional information on connecting your hook-up cables.
- A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output (INPUT: 4 in the example on page 26). Refer to your VCR operating guide for more information on line input-output connections.
- Connect only 1 component (VCR, DVD player, camcorder, etc.) to each input jack.
- COMPONENT: Y-P_BP_R (Input 1 & 2) connections are provided for high performance components, such as DVD players and set-top-boxes. Use these connections in place of the standard video connection if your device has this feature.
- Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV's P_B input and the components R-Y output to the TV's P_R input.
- Your component outputs may be labeled Y-C_BC_R. In this case, connect the components C_B output to the TV's P_B input and the components C_R output to the TV's P_R input.
- It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-P_BP_R inputs. (See page 57)
- To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the $^{Y\text{-}}P_BP_R$, RGB and HDMI input jacks.
- Input 1 or 2 can accept HDMI signal.
- Input 1 or 2 can accept both component and composite video signal.
- S-VIDEO monitor output may be used for recording only when the input is of S-VIDEO type.
- When using a DVI or HDMI input from a Set-Top-Box, it is recommended to use a 1080i or 720p input signal.

In addition to controlling all the functions on your HITACHI Plasma TV, the new remote control is designed to operate different types of VCRs, CATV (Cable TV) converters, set-top-box, satellite receiver, DVD players, and other audio/video equipment with one touch. Basic operation keys are grouped together in one area.

To operate your Plasma TV, point the remote control at the remote sensor of the AVC box/Display Monitor and select the TV by pressing the ◄ or ► button of the Source Access on the remote. The TV mode indicator will blink, indicating that the remote will now control your television.

To operate your VCR, point the remote at the remote sensor of the VCR and select PVR by pressing the ◄ or ► button of the Source Access on the remote. The PVR mode indicator will blink, indicating that the remote will now control your VCR (see page 45 for instructions on how to program the remote to control your VCR).

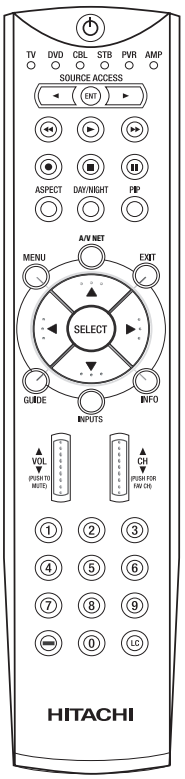
To operate your PVR (Personal Video Recorder), point the remote at the remote sensor of the PVR and select PVR by pressing the ◄ or ► button of the Source Access on the remote. The PVR mode indicator will blink, indicating that the remote will now control your PVR (see page 47 for instruction on how to program the remote to control your PVR).

To operate your cable box, point the remote at the remote sensor of the cable box and select the CABLE (CBL) by pressing the ◄ or ► button of the Source Access on the remote. The CBL mode indicator will blink, indicating that the remote will now control your cable box (see page 44 for instructions on how to program the remote to control your cable box).

To operate your set-top-box or satellite receiver point the remote at the remote sensor of the set-top-box and select the SET-TOP-BOX (STB) by pressing the ◄ or ► button of the Source Access on the remote. If you have a satellite receiver, use this button to program your satellite receiver. The STB mode indicator will blink, indicating that the remote will now control your set-top-box (see page 45 for instructions on how to program the remote to control your set-top-box).

To operate your DVD player, point the remote at the remote sensor of the DVD player and select DVD by pressing the ◄ or ► button of the Source Access on the remote. The DVD mode indicator will blink, indicating that the remote will now control your DVD Player (see page 46 for instruction on how to program the remote to control your DVD player).

To operate additional audio equipment, point the remote at the remote sensor of the component you wish to control and select AMP by pressing the ◄ or ► button of the Source Access on the remote. The AMP mode indicator will blink, indicating that the remote will now control your audio equipment (see page 48 for instructions on how to program the remote to control additional



NOTE: When you press any remote control button, the buttons will light up. The illumination will light a few seconds during this time. The buttons will appear to light if the room is dark.

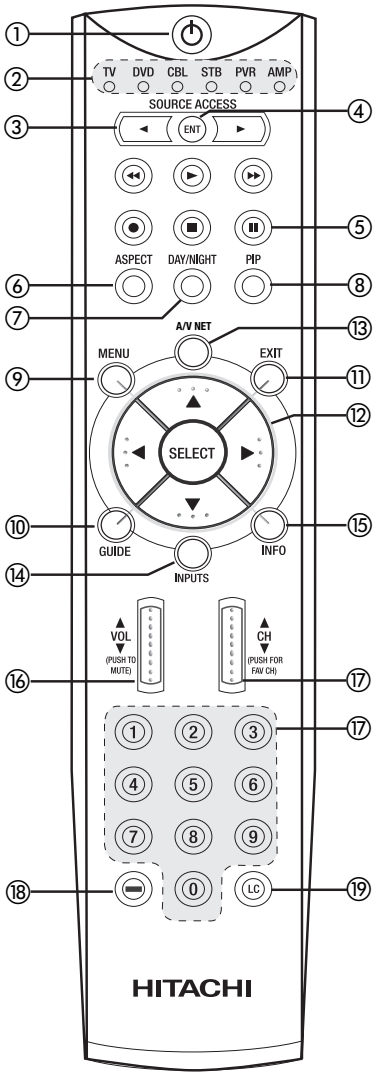
DESCRIPTION: THE DEFAULT BACK LIGHTING TIME IS 4 SECONDS. THIS LIGHTING TIME CAN BE CHANGED TO A MAXIMUM TIME OF 8 SECONDS OR TURNED OFF. THIS GIVES THE RC A TOTAL OF 3 OPTIONAL LIGHT TIME CYCLES (OFF, 4 SECONDS OR 8 SECONDS.)

1. PLACE THE RC IN TV MODE.
   1. PROGRAMMING OPTIONAL BACK LIGHT CYCLES.
   2. PRESS AND HOLD THE "ENT" KEY.
   3. WHILE HOLDING DOWN THE "ENT" KEY ENTER THE FOLLOWING KEYS IN SEQUENCE: "-" + "-" + "INPUT" + "THE NUMBER KEY OF THE DESIRED LIGHT CYCLE".

2. LIGHT CYCLE EQUIVALENTS
   1. BACK LIGHT TURNED OFF = "0" KEY (ENTERED AS THE LAST KEY OF THE PROGRAM SEQUENCE)
   2. BACK LIGHT FOR 4 SEC = "4" KEY (ENTERED AS THE LAST KEY OF THE PROGRAM SEQUENCE)
   3. BACK LIGHT FOR 8 SEC = "8" KEY (ENTERED AS THE LAST KEY OF THE PROGRAM SEQUENCE)

3. SETUP EXAMPLE
   1. EXAMPLE SETUP FOR 8 SECOND LIGHT CYCLE3. SETUP EXAMPLE
   2. PLACE RC IN TV MODE
   3. PRESS AND HOLD "ENT" KEY
   4. WHILE HOLDING DOWN THE "ENT" KEY ENTER THE FOLLOWING KEYS IN SEQUENCE:
   5. THE TV MODE LED ON THE RC WILL FLASH 3 TIMES IF THE SETUP WAS DONE CORRECTLY "-" + "-" + "INPUT" + "8".

HOW TO USE THE REMOTE TO CONTROL YOUR PLASMA TV



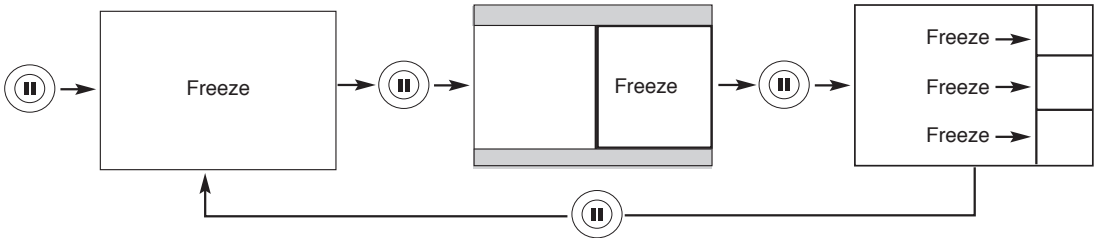
① **POWER button**
Press this button to turn the TV set on or off when the remote is in TV mode. (See page 28 for instructions on how to set the remote control to TV mode.)

② **MODE Indicator**
Turns on or blinks to show remote control mode.

③ **SOURCE ACCESS (◄ or ►) buttons**
Press these buttons to select remote control mode.

④ **SOURCE ACCESS (ENT) button**
Hold down this button while entering your device code to program the remote (see pages 44-52). You can also use this button in an optional Input access feature (see page 49).

⑤ **PAUSE button**
Press the PAUSE button to freeze the picture. Press the EXIT button to return the picture to motion. Press the PAUSE button repeatedly to cycle through the three different freeze modes (see page 43).



⑥ **ASPECT button**
Press this button to quickly change the picture format ASPECT ratio.

Depending on the input signal format received, the picture format ratio allows you to adjust the images through the following options.

4:3 STANDARD — Use this aspect mode to display conventional (4:3) images. Side panels (gray areas) are placed to the left and right of the image to preserve the original aspect ratio of the source. Note: Use this mode for only 15% of your total viewing time to prevent uneven aging of the phosphors. Phosphors in the lighted area of the picture will age more rapidly than the gray areas.

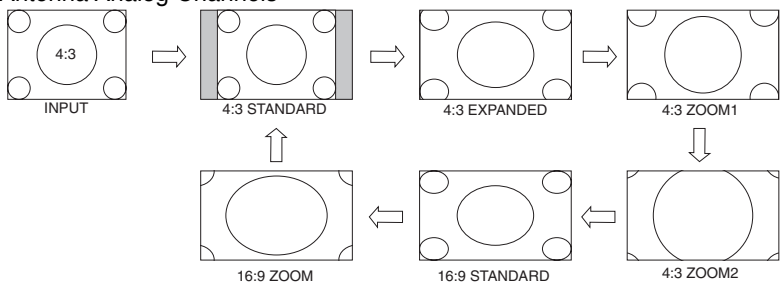
4:3 EXPANDED — Use this aspect mode to display conventional (4:3) sources by linearly increasing image expansion from the center towards the edges of the display area in order to fill it.

4:3 Zoom1/Zoom2 — Use these aspect modes to zoom in on conventional (4:3) sources.

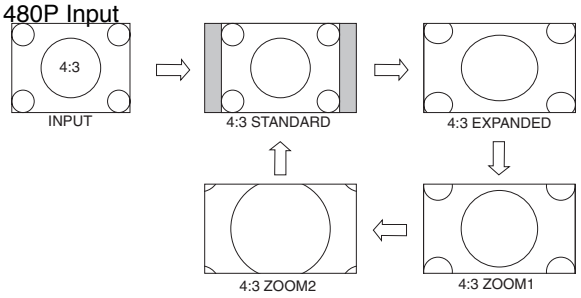
16:9 STANDARD — Use this aspect mode to display 16:9 sources like HDTV and DVD's preserving the original 16:9 aspect ratio.

16:9 Zoom — Use this aspect to Zoom-in once while in 16:9 aspect.

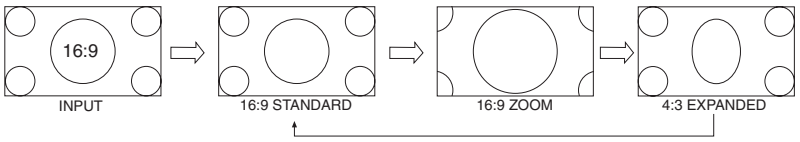
(1) Antenna Analog Channels



(2) 480P Input



(3) 720P/1080i Input



(4) RGB (Analog Input) ASPECT DISPLAY MODE.

	RGB (Analog) INPUT SIGNAL					
	Others	SVGA/XGA	VGA	480p	720p	1080i
ASPECT MODE AVAILABILITY	X	REAL	REAL	REAL(1)	X	X
	NORMAL	NORMAL	NORMAL	NORMAL(1)	X	X
	FULL	FULL	FULL	FULL(1)	FULL(2,3)	FULL(2,3)

For numbers in ( ), please see corresponding note below.

NOTES:
1. Lack of raster can be seen in RGB (Analog) when a 480p signal is input.
2. AUTO ADJUST function (see page 87) is not available in 720p and 1080i input signal.
3. FULL aspect mode, only 95% of information can be displayed (5% is treated as overscan).
4. Depending on the Aspect selection, Closed Caption display may be missing.

⑦ **DAY/NIGHT button**
Press this button to toggle between Day and Night picture mode settings. Select Day for day time viewing with more brightness and contrast to compete with room light. Select Night for night time viewing with less brightness and contrast for a more detailed picture (see page 54 for settings changes).

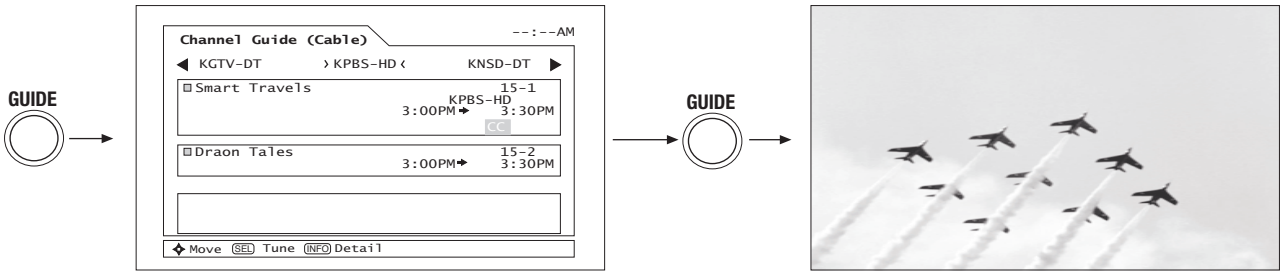
NOTE: For automatic DAY/NIGHT picture mode settings, see page 71.

⑧ **PICTURE-IN-PICTURE button**
See separate section on pages 41-42 for a description.

⑨ **MENU button**
The MENU button will start the On-Screen Display.

⑩ **GUIDE button**
Press this button to access the Channel Guide. Press the GUIDE button again to return to normal viewing.

Select CHANNEL GUIDE to display available program information. Only scanned programs that are available at the present time will show in the Channel Guide (see Auto Channel Scan on page 63).



Use the CURSOR PAD ▲ , ▼ , ◀ and ▶ to highlight the channel of choice (example: KPBS-HD).
Press the CURSOR PAD ▲ or ▼ , to highlight the subchannel of choice (example: 15-1).
Press the SELECT button to tune the subchannel of choice.

NOTE: The availability of Channel Guide Information will depend on the type of Antenna input (Analog or Digital) and Cable subscription.

⑪ **EXIT button**
This button will exit all On-Screen Displays.

⑫ **CURSOR PAD/SELECT button**
All the On-Screen Display features can be set or adjusted by using the CURSOR PAD, except for numeric entries.
The CURSOR PAD will highlight functions or adjust and set different features. Press the CURSOR PAD toward desired direction and press the SELECT button to select.

⑬ **AV NET button**

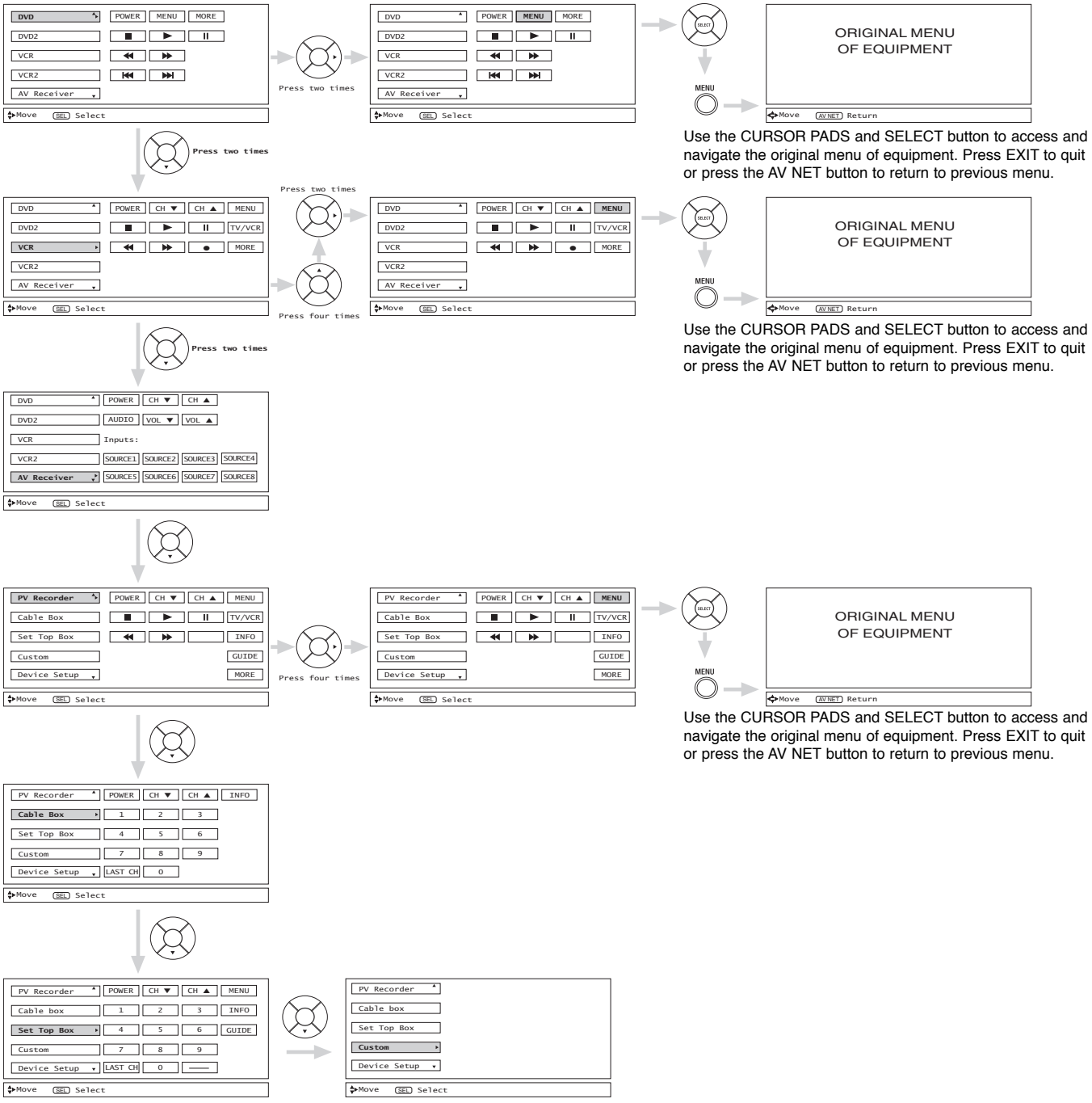
Press this button to access the Audio/Video network (AV Net) menu. The AV Net allows the user to control external components with the Plasma TV's remote control. When you press the AV NET button, the following window will pop up within the Display Monitor screen. The window will disappear after 30 seconds if you don't press any buttons.

Select Device Setup to start.

Use CURSOR PAD ▲, ▼, ◀ and ▶ to navigate and SELECT or CURSOR PAD ▶ to select button. The command on the button is passed through the IR mouse and onto the AUDIO/VIDEO equipment. These on-screen buttons are called "Soft Keys".

Customize your Audio/Video equipment list and soft keys by selecting the Custom options and following the instructions of the AV NET learning wizard (see page 33).

This window shows the available Audio/Video equipment soft keys. The equipment list will scroll up or down.


Press two times
Press two times
Press four times
Press two times
Press four times
ORIGINAL MENU
OF EQUIPMENT
MENU
Use the CURSOR PADS and SELECT button to access and navigate the original menu of equipment. Press EXIT to quit or press the AV NET button to return to previous menu.

NOTES:

1. Devices will not be available until Device Setup is completed (see pages 22-25).
2. The "Custom" option will not be available until the Custom device Setup is learned and completed. After completion, the "Custom" tag will be replaced with the device tag.
3. The Custom option only accepts one device at a time. The second Custom device setup will replace the first device.

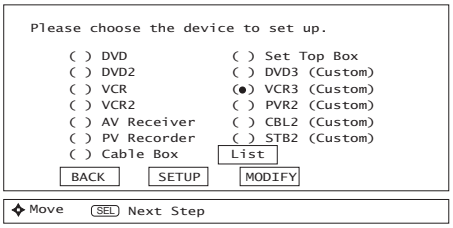
HOW TO USE THE REMOTE TO CONTROL YOUR PLASMA TV

AV NET LEARNING WIZARD

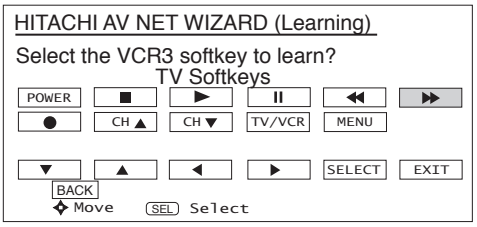
This function of the AV NET makes it more expandable because it allows the user to use equipment that is not supported by the AV NET Codes. For example, after programming your equipment to the AV NET and the soft keys do not work, the user just has to follow the steps below. The AV NET Learning Wizard will transfer any remote button IR code of your equipment to the soft keys of your AV NET. If all remote button transfers are successful, the user can now control their equipment by using the Plasma TV remote control.

A Custom VCR Setup example is shown below. Setup of Custom DVD3, PVR2, CBL2 and STB2 follows the same procedure.

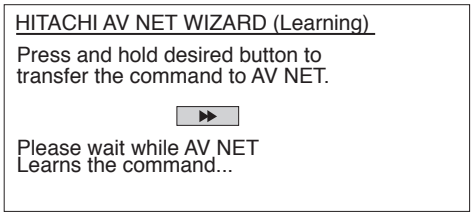
1. Press A/V NET button on the remote control.
2. Use the CURSOR PAD ▲ or ▼ to select DEVICE SETUP, press the SELECT button or CURSOR PAD ►.
3. Use the CURSOR PAD (▲ or ▼) and SELECT button to choose one CUSTOM option (Ex. VCR3).
4. Press the SELECT button to access the Setup screen.



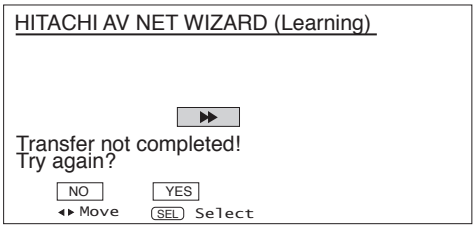
5. Select the preferred TV Softkeys (Ex. ►► button)to learn, press the SELECT button.



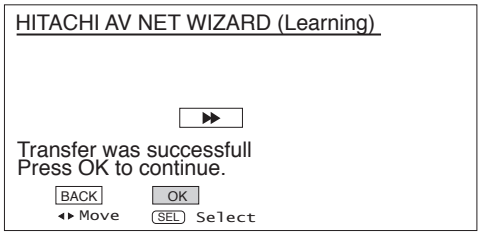
6. Press and hold the ►► button of the VCR remote control while pointing directly at the learning AV NET sensor of the AVC (see pages 9-10) at a distance of 2 to 3 meters or 5 to 10 feet.


HITACHI AV NET WIZARD (Learning)
Press and hold desired button to transfer the command to AV NET.
Please wait while AV NET Learns the command...

7. If the code is not accepted, the screen below appears.

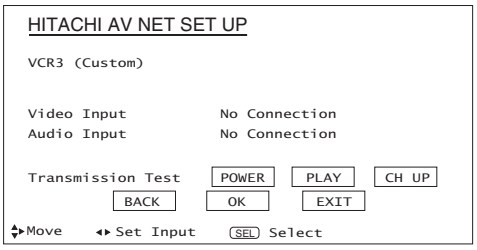


8. If the code transfer was succesful, the screen below appears.
9. Select OK to continue.

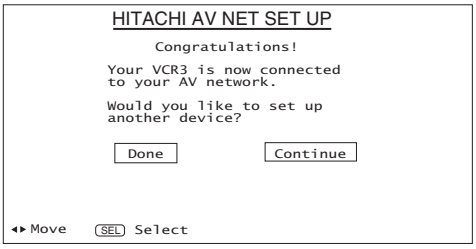


10. A check mark appears next to the programmed softkey. Select DONE to EXIT or CONTINUE to learn another softkey.

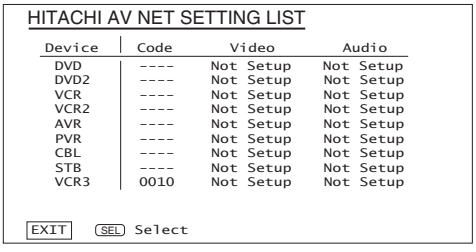
11. Use the CURSOR PAD ▼ to select Video Input. Press the CURSOR PADS ◄ or ► to set the INPUT to which your device is connected.
12. Repeat step 11 for Audio Input. If the DVD is connected to the TV, select “Using TV”. If the DVD is connected to an external amplifier, select “no connection”.
13. Press CURSOR PAD ▼ to select Transmission Test. Perform a Transmission Test by selecting Power, Play, or CH UP softkeys. If the device responds, then it is properly set up. Select OK.



14. Press Done.



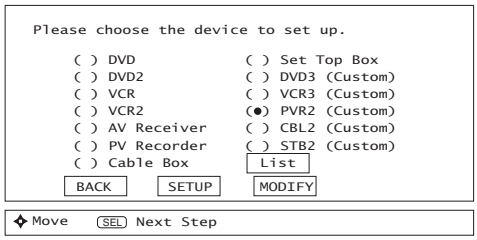
15. Press Exit to Quit.


HITACHI AV NET SETTING LIST
Device
Code
Video
Audio
DVD ---- Not Setup Not Setup
DVD2 ---- Not Setup Not Setup
VCR ---- Not Setup Not Setup
VCR2 ---- Not Setup Not Setup
AVR ---- Not Setup Not Setup
PVR ---- Not Setup Not Setup
CBL ---- Not Setup Not Setup
STB ---- Not Setup Not Setup
VCR3 0010 Not Setup Not Setup
EXIT
SEL Select

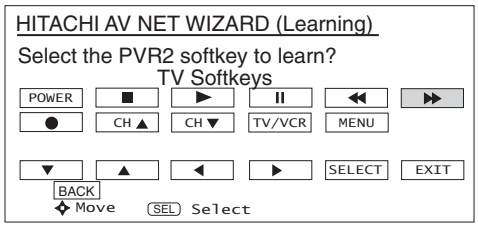
AV NET LEARNING WIZARD

For example, after programming your AV Receiver to the AV NET and the soft keys do not work, the user has to use the AV NET Learning Wizard. The AV NET Learning Wizard will transfer any remote button IR code of your AV Receiver to the soft keys of your AV NET. Since an AVR2 (Custom) is not available in the device setup screen, the user can choose any custom device. For this setup example, we have chosen the PVR2 (Custom) device.

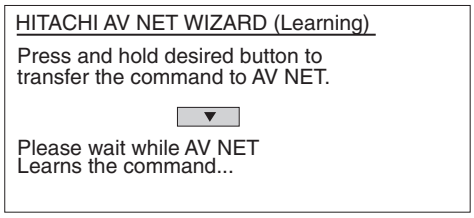
1. Press A/V NET button on the remote control.
2. Use the CURSOR PAD ▲ or ▼ to select DEVICE SETUP, press the SELECT button CURSOR PAD ▶.
3. Use the CURSOR PAD (▲ or ▼) and SELECT button to choose one CUSTOM option (Ex. PVR2).
4. Press the SELECT button to access the Setup screen.



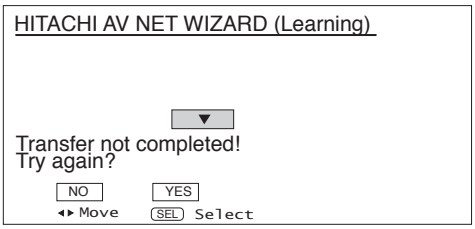
5. Use the CURSOR PAD to select the prefered Softkeys (Ex. ▼ button) to learn, press the SELECT button.



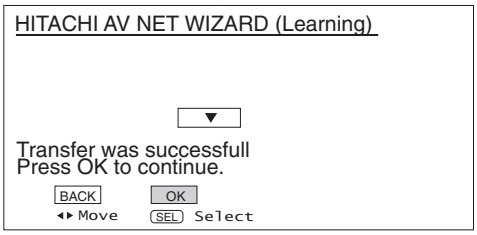
6. Press and hold the ▼ button of the AVR remote control while pointing directly at the learning AV NET sensor of the AVC (see pages 9-10) at a distance of 2 to 3 meters or 5 to 10 feet.


HITACHI AV NET WIZARD (Learning)
Press and hold desired button to transfer the command to AV NET.
Please wait while AV NET Learns the command...

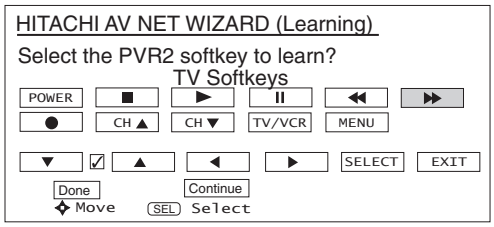
7. If the code is not accepted, the screen below appears.



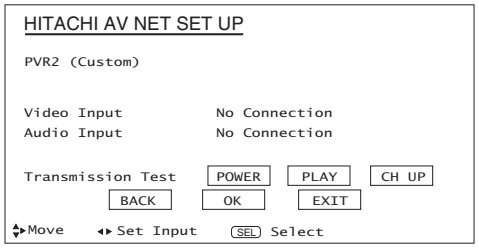
8. If the code transfer was succesful, the screen below appears.
9. Select OK to continue.



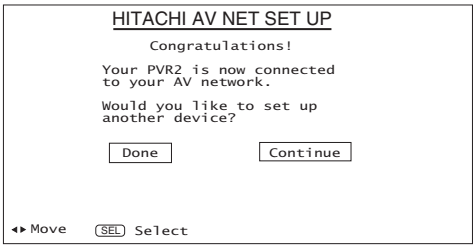
10. A check mark appears next to the programmed softkey. Select DONE to EXIT or CONTINUE to learn another softkey.



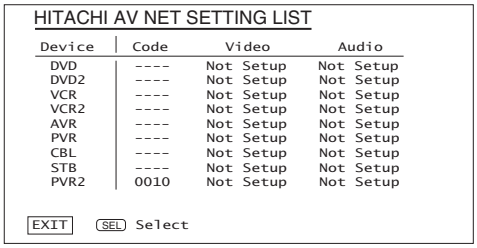
11. Use the CURSOR PAD ▼ to select Video Input. Press the CURSOR PADS ◀,▶ to set the INPUT to which your device is connected.
12. Repeat step 11 for Audio Input. If the AVR is connected to the TV, select “Using TV”. If the AVR is connected to an external amplifier, select “no connection”.
13. Press CURSOR PAD ▼ to select Transmission Test. Perform a Transmission Test by selecting Power, Play, or CH UP softkeys. If the device responds, then it is properly set up. Select OK.



14. Press Done.



15. Press Exit to Quit.


HITACHI AV NET SETTING LIST
Device | Code | Video | Audio
DVD | ---- | Not Setup | Not Setup
DVD2 | ---- | Not Setup | Not Setup
VCR | ---- | Not Setup | Not Setup
VCR2 | ---- | Not Setup | Not Setup
AVR | ---- | Not Setup | Not Setup
PVR | ---- | Not Setup | Not Setup
CBL | ---- | Not Setup | Not Setup
STB | ---- | Not Setup | Not Setup
PVR2 | 0010 | Not Setup | Not Setup
EXIT
SEL Select

NOTES:

1. To access the Menu function of a specific equipment, select the “MENU” soft key on OSD, then press the MENU button of the Plasma TV remote control. In order to use CURSOR PAD and EXIT button of the Plasma TV remote control, “arrows, select, and EXIT” button must be learned. Then the menu of the programmed equipment can be controlled with the Plasma TV remote control.
2. When using the Learned device with the Timer Recording function, the Power, Stop and Record soft Keys should be learned first.

⑭ **INPUTS button**
When the remote control is in TV mode, press this button to access the INPUTS menu. Use the CURSOR PAD and SELECT button to select the inputs that are being used. Pressing the INPUTS button repeatedly will also cycle through the Inputs menu items. Then press the SELECT button to select.

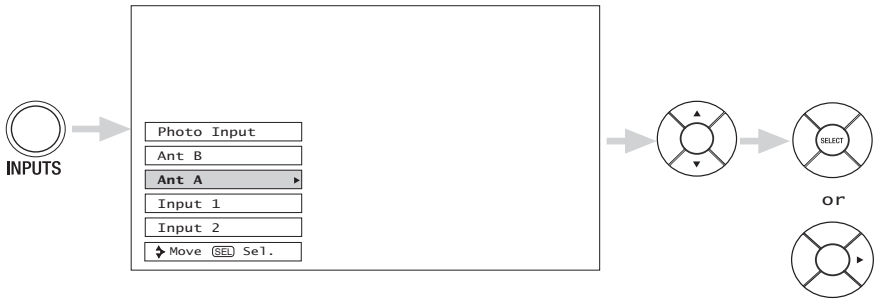
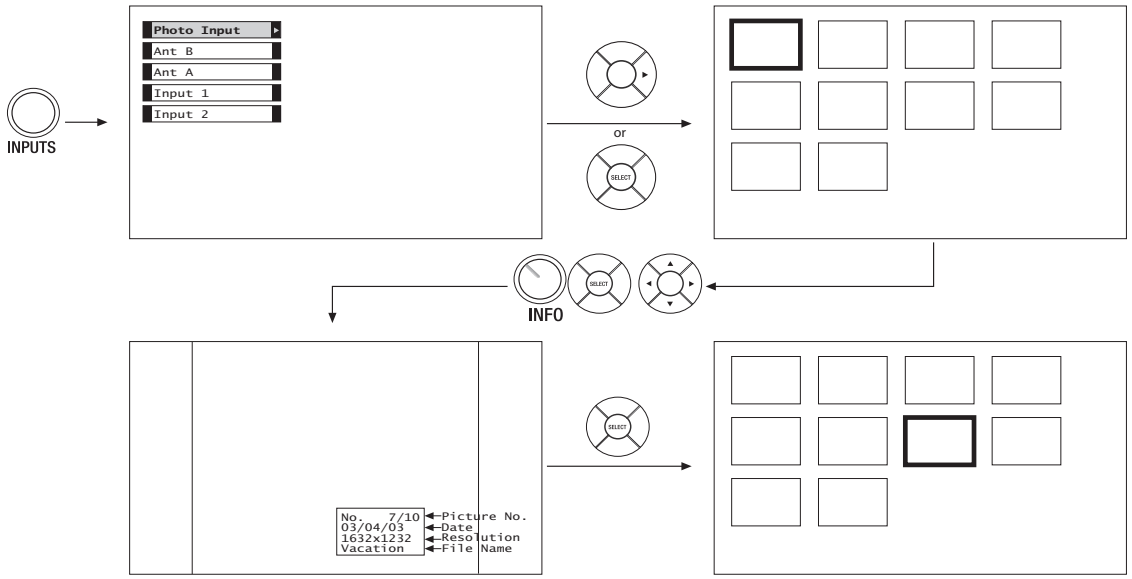


Photo Input	Select to access your pictures from a digital camera connected to the Photo Input in the front panel of the AVC (see page 36).
Ant B	Select to choose Antenna B.
Ant A	Select to choose Antenna A.
Input 1	Select to choose Input 1 for Video 1.
Input 2	Select to choose Input 2 for Video 2.
Input 3	Select to choose Input 3 for Video 3.
Input 4	Select to choose Input 4 for Video 4.
Input 5	Select to choose Input 5 for Video 5.
RGB	Select to choose for RGB input (see pages 81-90).
IEEE 1394	Select to choose for IEEE 1394 Input (see page 38).

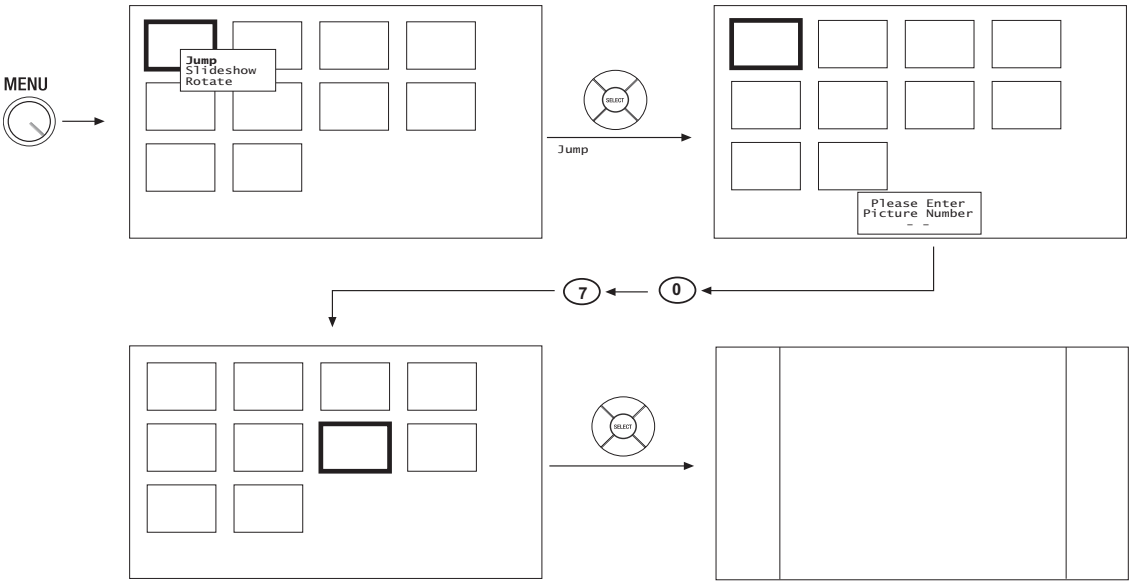
PHOTO INPUT

This feature is useful for viewing digital still pictures from your digital camera using the Photo Input in the front panel of the TV.



JUMP

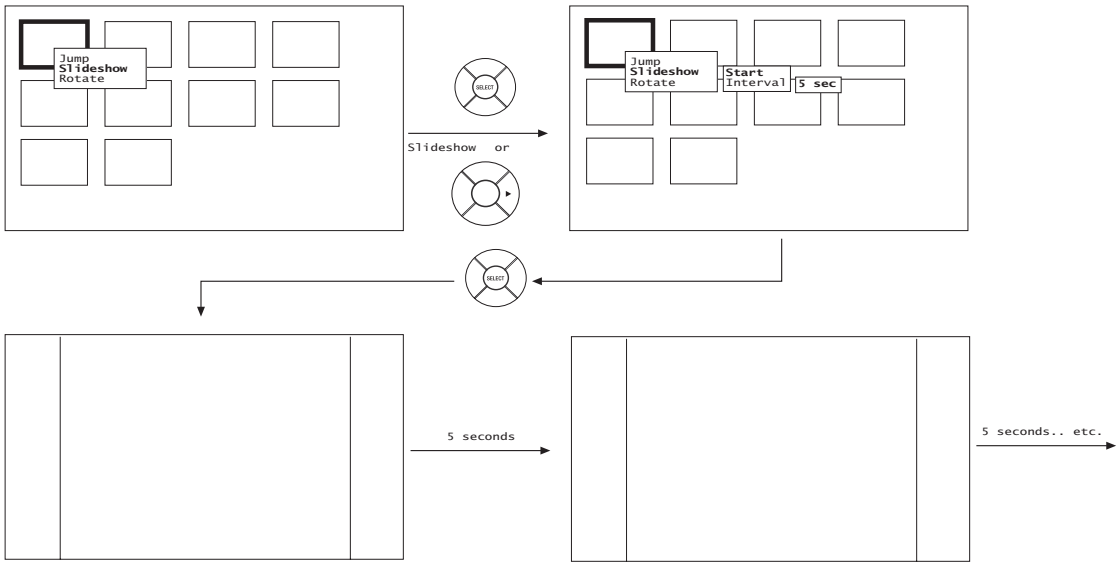
Select this menu item to view the chosen picture number.



NOTES:

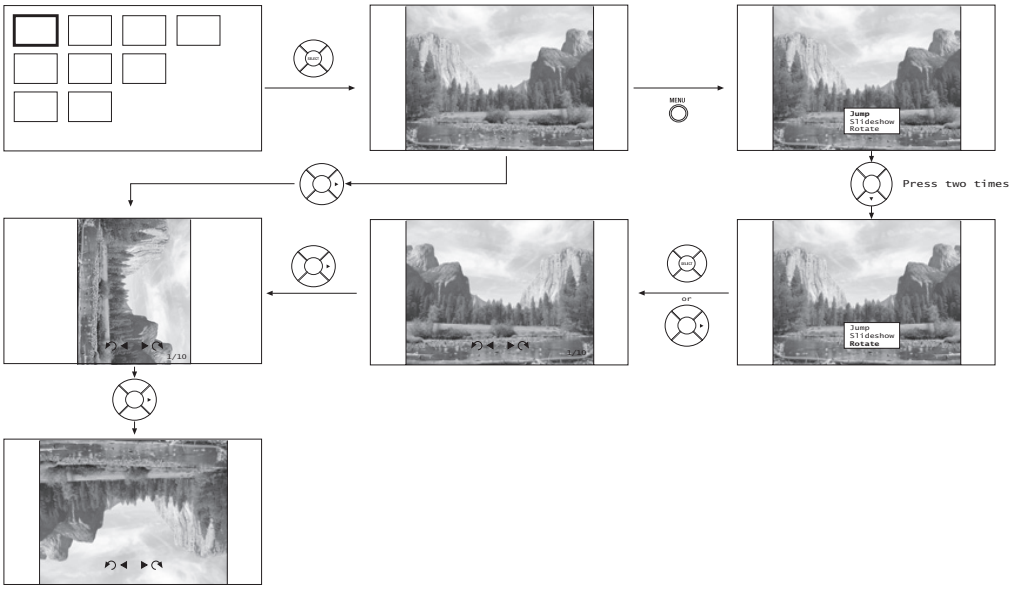
1. Contrast will decrease automatically if stationary images such as digital still photos are left on the screen for more than 3 minutes.
2. The maximum number of digital Photos that can be displayed is 999.
3. Press INFO button to show Picture Numbers in Thumbnail view, plus other information in individual photos.
4. Digital photos recorded on a DVD-RAM disc may not work with this Photo Input.
5. Certain types of digital cameras may not work with this Photo Input.
6. Digital cameras with low battery power may not properly display your photos in this input.
7. The screen may show “Input device not detected” if the digital camera’s large capacity memory is fully loaded. Please wait 1 or 2 minutes before checking your Photo Input connections.
8. The screen may show “Input device not detected” due to slow access time on some digital cameras. Please wait 1 or 2 minutes before checking your Photo Input connections.

SLIDESHOW
Select this menu item to start a slideshow of the Photos in the Digital Camera. Time interval selections can be set from 5, 10 and 30 seconds.



Use CURSOR PAD ▲, ▼ to highlight Slideshow item.
While interval is highlighted, press SELECT to change interval time from 5, 10 and 30 seconds. Each press will change interval time from the three mentioned choices.
Press SELECT to stop on a chosen picture of the slideshow. After 30 seconds, the slideshow will resume, or press SELECT again to continue the slideshow.

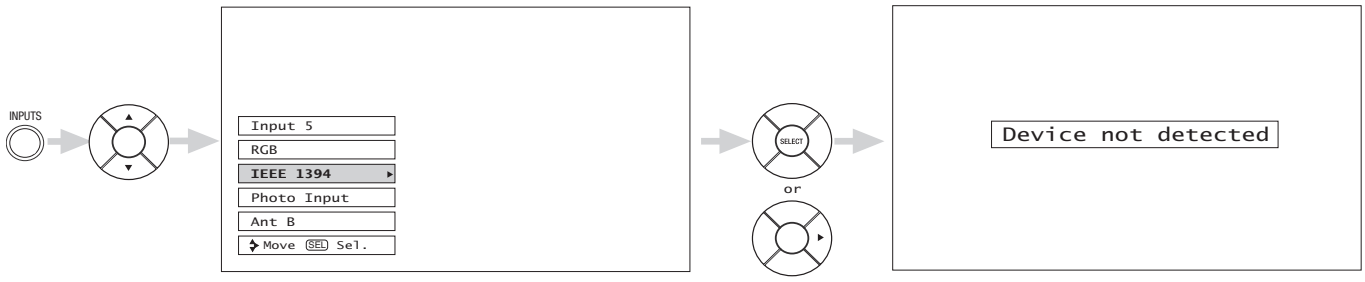
ROTATE
Select this menu item to rotate selected photos either clockwise (CURSOR PAD ▶) and counterclockwise (CURSOR PAD ◀).
Rotate menu item is also available in THUMBNAIL view.



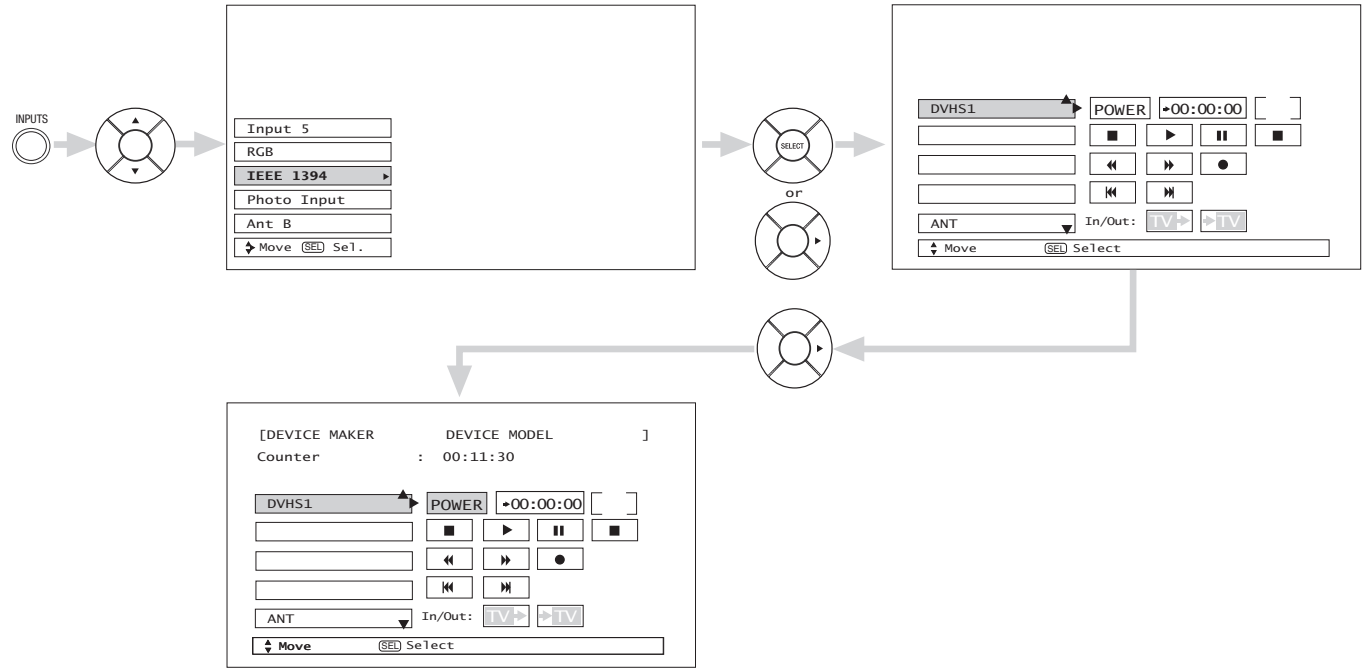
NOTES:
1. Automatic contrast reduction also applies during SLIDESHOW, then press any button to continue.
2. Photo file names modified on a computer should be 8 characters (Ex. ABCD1234.jpg). 1st character: letters; 2nd to 4th: letters or numbers; 5th to 8th: numbers. Photo files should be first placed on a sub directory name with 8 characters (Ex. 123ABCDE). 1st to 3rd: number; 4th to 8th: letters. The sub directory then should be placed on a main directory with a “dcim” file name format.
3. Supported image types are up to 3072 x 2304; JPEG format should conform with DCF Standard (Design rule for Camera File System).
4. This TV set displays only digital pictures from digital cameras which meet DCF Standard. Pictures that were copied, edited or modified on a computer may not be displayed on the TV set.

IEEE1394 Use this function to control your devices with digital interface capability. Press the INPUTS button, CURSOR PAD and SELECT button to select IEEE 1394.

(When an IEEE1394 device is not connected)



(When an IEEE1394 device is connected)



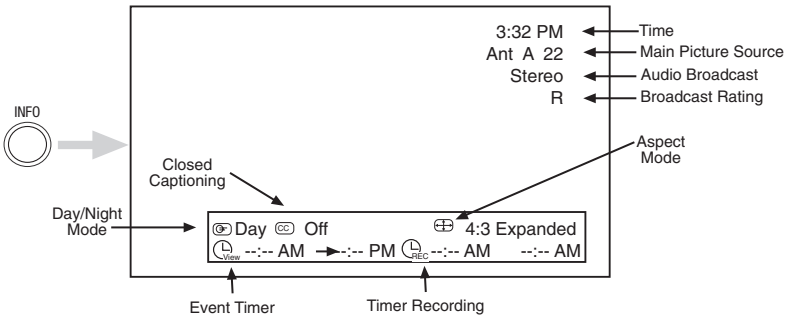
Use CURSOR PAD ▲ or ▼ to highlight connected device (example D-VHS1).
Use CURSOR PAD ► to select connected device (example D-VHS1).
Use CURSOR PAD cursors to highlight POWER.
Press the SELECT button to power on the device.
Use CURSOR PAD cursors to select D-VHS operation.
Press down on the CURSOR PAD to enable the selected operation.
Use CURSOR PAD cursors to highlight the TV IN/OUT operation.
Press down on CURSOR PAD to select: TV IN is DVHS
TV OUT is ANT A

NOTES:
1. The digital device will be automatically recognized if properly connected.
2. Four (4) IEEE1394 devices can be listed on the menu, but only 1 device at a time can be used. If a fifth device is connected, it will replace the first device on the menu list.
3. This TV's IEEE1394 connection is not compatible with a DV camcorder (Digital Video Camcorder) or a PC.
4. The On-Screen-Display will not disappear until the EXIT button is pressed.
5. Not all devices with IEEE1394 capability are compatible with this TV. Any compatibility problems with other manufacturers devices should be brought to the attention of those manufacturers.
6. TV IN/OUT functions are not available when DVHS is in playback or recording.

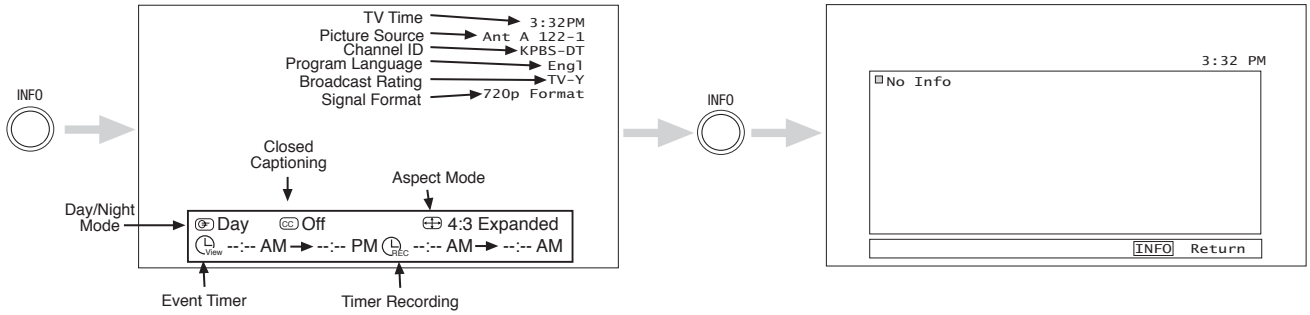
⑮ INFO button

Press this button when you want to check the channel being received, the picture source, if the channel has stereo (ST) or second audio program (SAP), the time, CHANNEL ID and if the TIMER is set.

ANALOG CHANNELS



DIGITAL CHANNELS



When an S-VIDEO Input is connected to VIDEO: 3.

When a COMPONENT VIDEO: Y-P_BP_R Input is connected to VIDEO: 1.

NOTES:
1. The Sleep Timer info will show momentarily after releasing INFO button.
2. Press the INFO button again or the EXIT button to return to normal viewing.

⑯ **VOLUME (VOL) WHEEL, MUTE button**
Use the VOL WHEEL (▲ or ▼) until you obtain the desired sound level.

To reduce the sound to one half of normal volume (SOFT MUTE) to answer the telephone, etc., press the VOL wheel down. Press the VOL wheel again to turn the sound off completely (MUTE). To restore the sound, press the VOL wheel one more time, or VOL Up (▲).

Closed Captioning will display automatically when MUTE/SOFT MUTE is on and Closed Caption is set to AUTO (see page 78).

When the TV power is turned off at a volume level 31 or greater, the volume level will default to 30 when the TV is turned on. However, if it is set to a level 30 or less, the volume level will be at the level it was set when the TV is turned ON.

⑰ **CHANNEL (CH) WHEEL/CHANNEL SELECTOR buttons**
The CHANNEL wheel or the CHANNEL SELECTOR buttons are used to select channels, lock access code, etc. Use the CHANNEL WHEEL (▲ or ▼) to select the desired channel. Use the CHANNEL SELECTOR buttons to enter one, two, or three numbers to select channels. Enter "0" first for channels 1 to 9, or simply press the single digit channel you wish to tune then wait a few seconds for the TV to tune. For Digital Channels, use the CHANNEL SELECTOR buttons with the (-) DASH button. Channel selection may also be performed by CHANNEL WHEEL up (▲) or CHANNEL WHEEL down (▼).

Press the channel (CH) wheel to switch to Favorite (FAV) channel mode. You will know you are in Favorite Channel mode when (FAV) is displayed and the displayed channel is GREEN. Press it again to return to your regular tuned channels. You can add any channel to your Favorite channel list by pressing and holding down the Channel (CH) wheel until the displayed channel turns from WHITE to highlighted GREEN. You can also delete a channel from your favorite channel list by pressing and holding down the Channel (CH) wheel until the displayed channel turns highlighted GREEN to WHITE.

⑱ **(-) DASH button**
Use the (-) DASH button with the CHANNEL SELECTOR buttons to enter Digital Channels that have subchannel numbers indicated by (-) DASH (example 15-1).

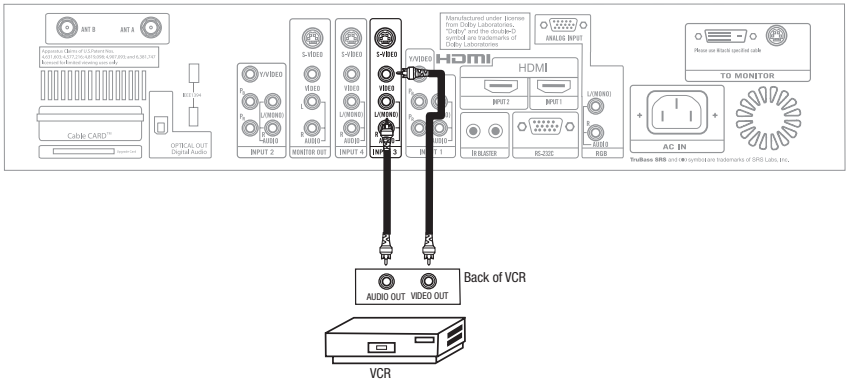
⑲ **LAST CHANNEL (LC) button**
Press this button to toggle between the current and last channel viewed.

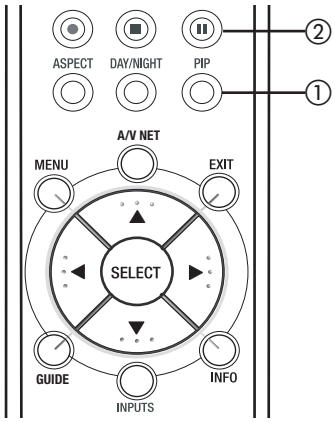
PICTURE-IN-PICTURE (PIP)

Your HITACHI Plasma TV incorporates Two Tuner technology designed for improved viewing enjoyment. This Two Tuner feature allows you to view antenna inputs on both the main picture and sub-picture simultaneously, with separate tuning control for each.

ANT A input can be viewed as both the main picture and the sub-picture simultaneously. ANT B can only be viewed as a main picture. To select between main picture and PIP sub-picture tuning, use the CURSOR PAD on the remote. The green highlighted channel display will move with every press of the CURSOR PAD (◄ or ►).

The Picture-in-Picture feature is convenient when you want to watch more than one program at the same time. You can watch a TV program while viewing other programs from any of the video inputs.

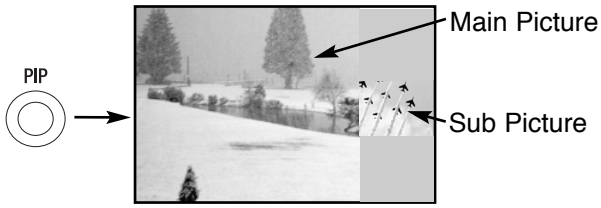




Use above connection to view VCR program as a sub-picture while viewing another program as main picture (ANT A, ANT B, INPUT:1, INPUT:2, INPUT:4, or INPUT:5). You may also view the VCR program as a main picture while viewing another program as a sub-picture (ANT A, INPUT:1, INPUT:2, INPUT:4 or INPUT:5).

① **PIP button**
Press the PIP button and a sub-picture will appear in one of the four different modes (POP, PIP, SPLIT or SURF), depending on the INPUT signal. To change the PIP mode, use the PIP button to cycle through the four different modes.

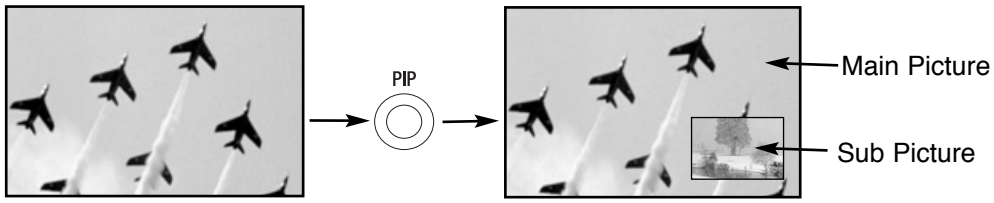
POP MODE PICTURE-IN-PICTURE
POP Mode PIP displays the sub-picture outside of the main picture. Use the CURSOR PAD (▲ or ▼) to move the sub-picture. This feature is not available with a 1080i signal. Please refer to the PICTURE-IN-PICTURE MODES Table (see page 42).



NOTES:
1. Digital Channels cannot be viewed as a sub-picture.
2. PIP MODE Picture-in-Picture is only available with a 1080i signal.
3. Press the CURSOR PAD (◄ or ►) to enable the sub-picture sound.
4. Sub-picture channel availability depends on the channel list.

PIP MODE PICTURE-IN-PICTURE

This feature is only available with a 1080i signal. To prevent a pattern burn, occasionally move the sub-picture using the CURSOR PAD.



SPLIT MODE PICTURE-IN-PICTURE

Split Mode PIP displays the main picture and sub-picture evenly on the screen.

SURF MODE PICTURE-IN-PICTURE

Surf Mode PIP automatically scans all active channels (those set in memory) and displays them as PIP sub-pictures or Thumbnail channels.

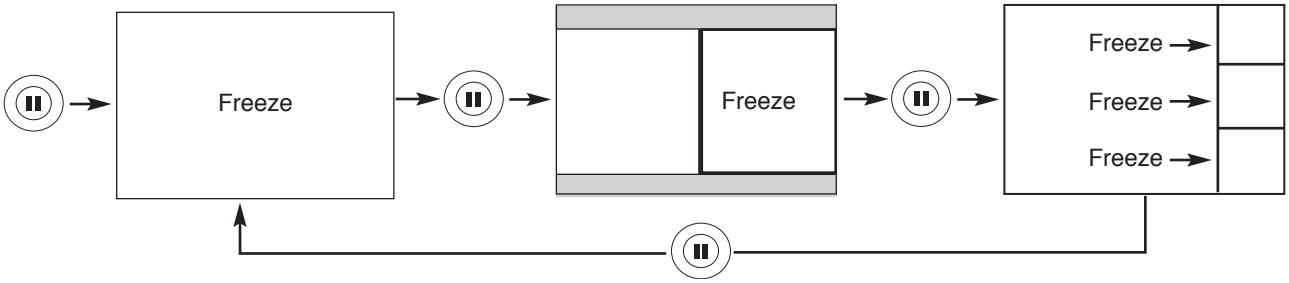
NOTE: Selecting individual sub-pictures while in Surf mode is not available.

PICTURE-IN-PICTURE (PIP) MODES

PIP Mode	Main \ Sub	NTSC	480i	480p	720p	1080i
POP	NTSC	Yes	Yes	-	-	Yes
	480i	Yes	Yes	-	-	Yes
PIP 4x3	1080i	Yes	Yes	-	-	-
PIP 16x9	1080i	Yes	Yes	-	-	Yes
SPLIT	NTSC	Yes	Yes	Yes	Yes	Yes
	480i	Yes	Yes	Yes	Yes	Yes
	480p	Yes	Yes	Yes	Yes	Yes
	720p	Yes	Yes	Yes	Yes	Yes
	1080i	Yes	Yes	Yes	Yes	Yes
12 Pix	-	Ant A/B	-	-	-	-

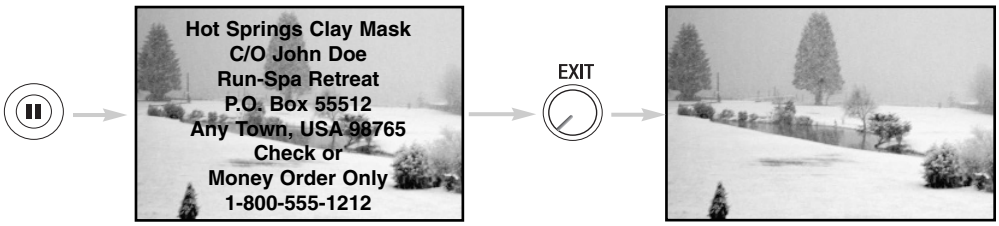
② **PAUSE button**

If you wish to freeze the sub-picture, press the PAUSE button. This is convenient when trying to write down the address for a mail order company, recording statistics for a sporting event, etc. To return the picture to motion, press the EXIT button. Press the PAUSE button repeatedly to toggle between FREEZE modes (Main Freeze, SPLIT and STROBE).



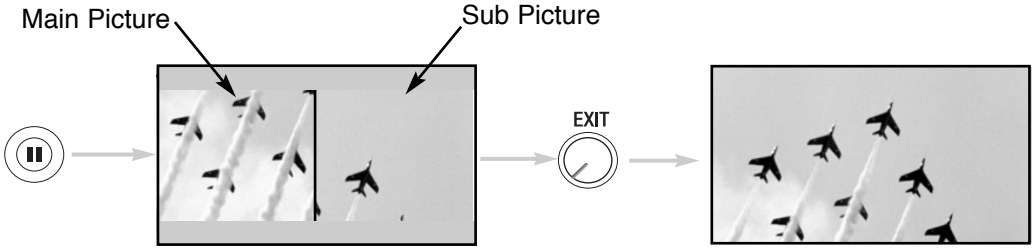
MAIN FREEZE

Press the PAUSE button to freeze one frame of the picture you are currently viewing and the frozen frame will show in the Main Picture. Press the EXIT button to return to normal viewing. This feature is useful for freezing a picture frame with addresses.



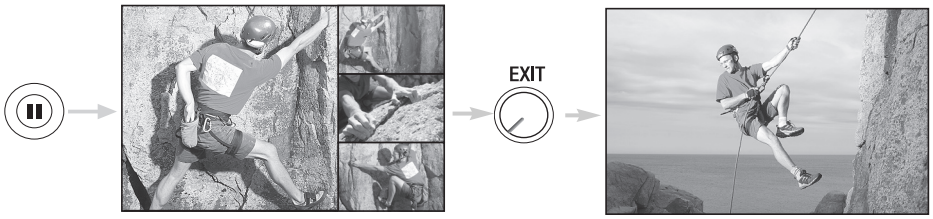
SPLIT FREEZE

Press the PAUSE button to freeze the picture you are currently viewing (only the right sub-picture will freeze). Press the EXIT button to return to normal viewing.



STROBE FREEZE

Press the PAUSE button to freeze three frames of the picture you are currently viewing (only the 3 sub-pictures will freeze). Press the EXIT button to return to normal viewing. This feature is useful for viewing a moving picture that has many details, for example, a close play in a sporting event or a golf swing.



NOTES:
1. The default FREEZE mode is the MAIN freeze followed by the SPLIT freeze and then the STROBE freeze. The last Freeze mode you selected before you pressed the EXIT button will be the one that comes up after pressing the PAUSE button again.
2. Each freeze frame in Strobe Freeze is delayed about 0.1 (1/10) second.
3. Strobe Freeze is not available in 480p/720p/1080i inputs.

HOW TO USE THE REMOTE TO CONTROL CABLE BOX FUNCTIONS

Operating the precoded function for your cable box.

This remote is designed to operate different types of cable boxes. You must first program the remote to match the remote system of your cable box (refer to pages 51-52 for pre-codes).

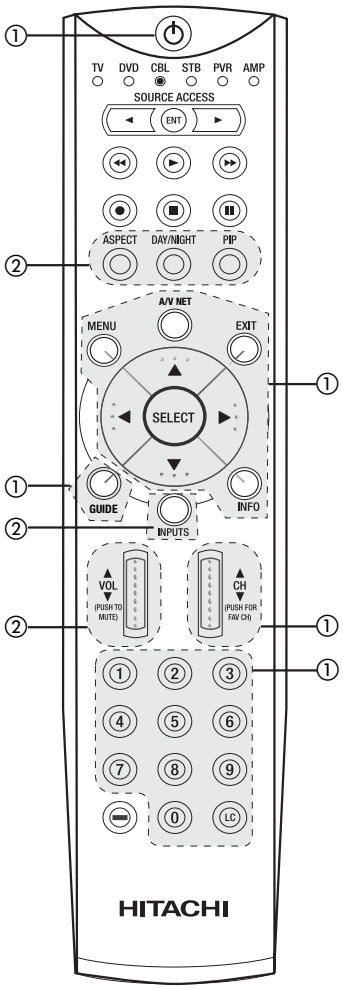
1. Turn ON your cable box.
2. Aim the remote control at the front of your cable box.
3. To switch to Cable (CBL) pre-coded mode, use the SOURCE ACCESS buttons (◄ or ►) on the remote control to position the LED light to the corresponding selection.
4. Hold down the ENT button on the remote and enter the four digit preset code that matches your cable box as shown on pages 51-52. Release the ENT button. The indicator light will flash 3 times if the code was accepted.
5. Aim the remote at the cable box and press the POWER button. The remote will turn off your cable box when the correct four digit preset code is entered. When this occurs, the remote control is programmed for your cable box. If the cable box does not turn off, try a different four digit preset code.
6. The remote will now control your Cable box.

NOTES:

1. If your cable box cannot be operated after performing the above procedures, your cable box code has not been precoded into the remote.
2. In the unlikely event that your cable box cannot be operated after performing the above procedures, please consult your cable box operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.

① **PRECODED CABLE BOX buttons**
These buttons transmit the chosen precoded cable codes.

② **EXCLUSIVE TV buttons**
These buttons are for operating the TV.



MY CABLE BOX CODE IS:_____

NOTE: Refer to instruction manual of the Cable Box for operation of the buttons exclusively for the Cable Box.

HOW TO USE THE REMOTE TO CONTROL SET-TOP-BOX/SATELLITE RECEIVER FUNCTIONS

Operating the precoded function for your set-top-box/satellite receiver.

This remote is designed to operate different types of set-top-box/satellite systems. You must first program the remote to match the remote system of your set-top-box/satellite systems (refer to pages 51-52 for pre-codes).

1. Turn ON your set-top-box/satellite systems.

2. Aim the remote control at the front of your set-top-box/satellite systems.

3. To switch to set-top-box/satellite (STB) pre-coded mode, use the SOURCE ACCESS buttons (◄ or ►) on the remote control to position the LED light to the corresponding selection.

4. Hold down the ENT button on the remote and enter the four digit preset code that matches your set-top-box/satellite receiver as shown on page 51-52. Release the ENT button. The indicator light will flash 3 times if the code was accepted.

5. Aim the remote at the set-top-box/satellite receiver and press the POWER button. The remote will turn off your set-top-box/satellite receiver when the correct four digit preset code is entered. When this occurs, the remote control is programmed for your set-top-box/satellite receiver. If the set-top-box/satellite receiver does not turn off, try a different four digit preset code.

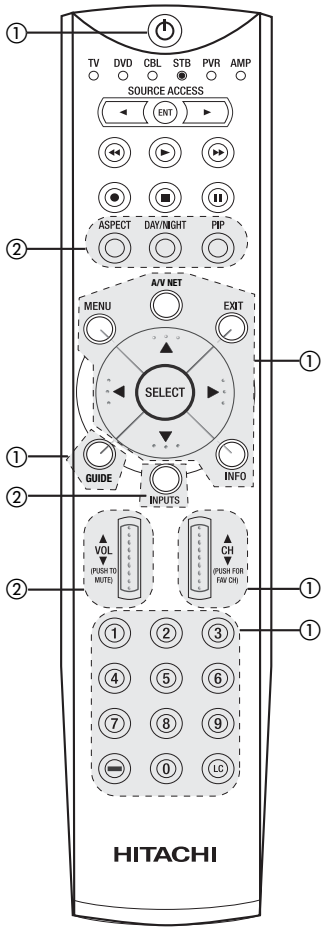
6. The remote will now control your set-top-box/satellite receiver.

NOTES:

1. If your set-top-box/satellite receiver cannot be operated after performing the above procedures, your set-top-box/satellite receiver code has not been precoded into the remote.

2. In the unlikely event that your set-top-box/satellite receiver cannot be operated after performing the above procedures, please consult your set-top-box/satellite receiver operating guide.

3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.



① **PRE-CODED SET-TOP-BOX/SATELLITE RECEIVER buttons**
These buttons transmit the chosen pre-coded set-top-box/satellite codes.

② **EXCLUSIVE TV buttons**
These buttons are for operating the TV.

MY SATELLITE RECEIVER/STB CODE IS:_____

NOTE: Refer to instruction manual of the set-top-box/satellite receiver for operation of the buttons exclusively for the set-top-box/satellite receiver.

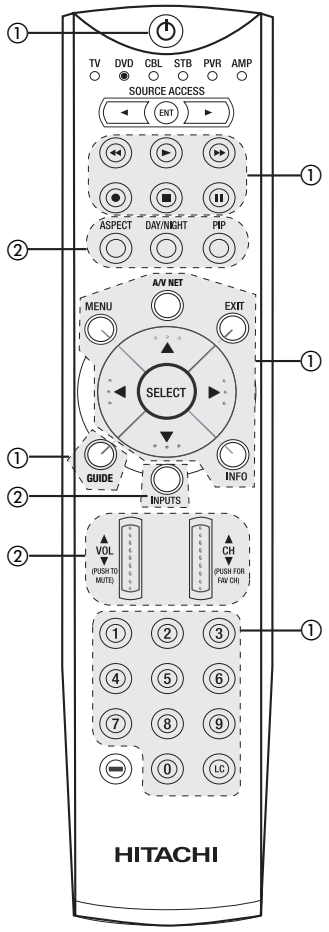
HOW TO USE THE REMOTE TO CONTROL DVD FUNCTIONS

Operating the precoded function for your DVD player.

This remote is designed to operate different types of DVD players. You must first program the remote to match the remote system of your DVD player (refer to pages 51-52 for pre-codes).

1. Turn ON your DVD player.
2. Aim the remote control at the front of your DVD player.
3. To switch to DVD pre-coded mode, use the SOURCE ACCESS buttons (◄ or ►) on the remote control to position the LED light to the corresponding selection.
4. Hold down the ENT button on the remote and enter the four digit preset code that matches your DVD player, as shown on pages 51-52. Release the ENT button. The indicator light will flash 3 times if the code was accepted.
5. Aim the remote at the DVD player and press the POWER button. The remote will turn off your DVD player when the correct four digit preset code is entered. When this occurs, the remote control is programmed for your DVD player. If the DVD player does not turn off, try a different four digit preset code.
6. The remote will now control your DVD player.
7. You will need to set the display type of your DVD player to 16:9 widescreen.

NOTES:
1. If your DVD player cannot be operated after performing the above procedures, your DVD player's code has not been precoded into the remote.
2. In the unlikely event that your DVD player cannot be operated after performing the above procedures, please consult your DVD player operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.



① **PRECODED DVD Buttons**
These buttons transmit the chosen precoded DVD codes.

② **EXCLUSIVE TV Buttons**
These buttons are for operating the TV.

MY DVD PLAYER CODE IS:_____

NOTE: Refer to instruction manual of the DVD player for operation of the buttons exclusively for the DVD player.

HOW TO USE THE REMOTE TO CONTROL VCR/PVR FUNCTIONS

Operating the precoded function for your VCR/PVR (Personal Video Recorder).

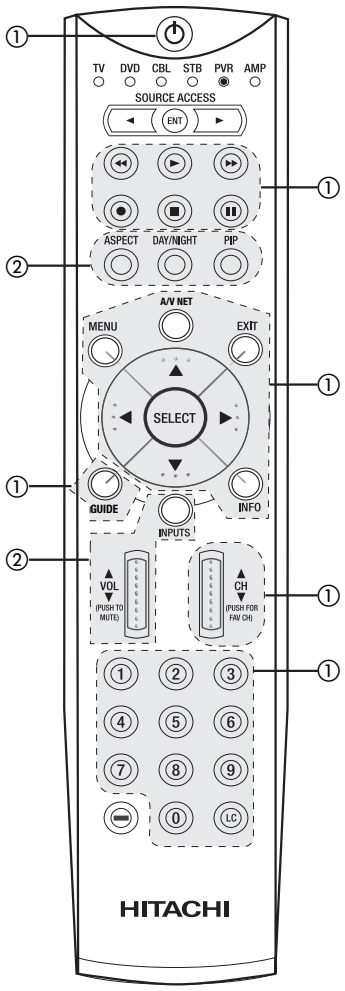
This remote is designed to operate different types of VCRs/PVRs. You must first program the remote to match the remote system of your VCR/PVR (refer to pages 51-52 for pre-codes).

1. Turn ON your VCR/PVR.
2. Aim the remote control at the front of your VCR/PVR.
3. To switch to VCR/PVR pre-coded mode, use the SOURCE ACCESS buttons (◄ , ►) on the remote control to position the LED light to the corresponding selection.
4. Hold down the ENT button on the remote and enter the four digit preset code that matches your VCR/PVR, as shown on pages 51-52. Release the ENT button. The indicator light will flash 3 times if the code was accepted.
5. Aim the remote at the VCR/PVR and press the POWER button. The remote will turn off your PVR when the correct four digit preset code is entered. When this occurs, the remote control is programmed for your VCR/PVR. If the VCR/PVR does not turn off, try a different four digit preset code.
6. The remote will now control your VCR/PVR.

NOTES:
1. If your PVR cannot be operated after performing the above procedures, your PVR's code has not been precoded into the remote.
2. In the unlikely event that your PVR cannot be operated after performing the above procedures, please consult your PVR operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.
4. VCR precode library is included in the PVR mode. Default device for this mode is Hitachi VCR.
5. INFO, GUIDE and LC (Last Channel) buttons are for PVR devices, not for VCR.

① **PRECODED VCR/PVR Buttons**
These buttons transmit the chosen precoded VCR/PVR codes.

② **EXCLUSIVE TV Buttons**
These buttons are for operating the TV.



MY VCR/PVR CODE IS:_____

NOTE: Refer to instruction manual of the VCR/PVR for operation of the buttons exclusively for the VCR/PVR.

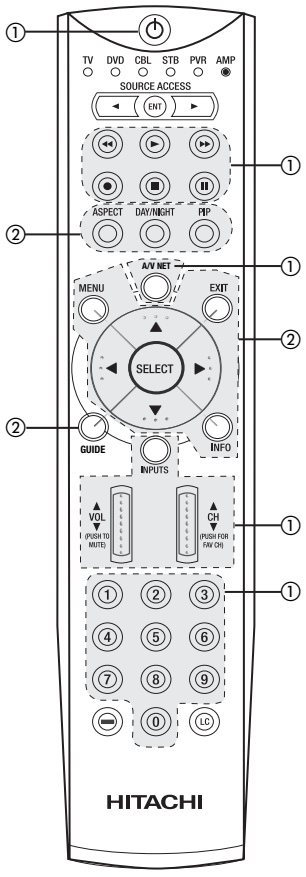
HOW TO USE THE REMOTE TO CONTROL ADDITIONAL AUDIO EQUIPMENT

Operating the precoded function for your Audio component.

This remote is designed to operate different types of Audio component. You must first program the remote to match the remote system of your Audio component (refer to pages 51-52 for pre-codes).

1. Turn ON your Audio component you wish to control with the Remote.
2. Aim the remote control at the front of your Audio component.
3. To switch to Audio (AMP) component pre-coded mode, use the SOURCE ACCESS buttons (◄ or ►) on the remote control to position the LED light to the corresponding selection.
4. Hold down the ENT button on the remote and enter the four digit preset code that matches your Audio component, as shown on pages 51-52. Release the ENT button. The indicator light will flash 3 times if the code was accepted.
5. Aim the remote at the Audio component and press the POWER button. The remote will turn off your Audio component when the correct four digit preset code is entered. When this occurs, the remote control is programmed for your Audio component. If the Audio component does not turn off, try a different four digit preset code.
6. The remote will now control your Audio component.
7. Repeat steps 1 - 6 if you wish to program the remote to control another Audio component.

NOTES:
1. If your Audio component cannot be operated after performing the above procedures, your Audio component's code has not been precoded into the remote.
2. In the unlikely event that your Audio component cannot be operated after performing the above procedures, please consult your Audio equipment operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.
4. CD precode library is included in the AMP mode. Default device for this mode is Hitachi Audio/Video Receiver (AVR/AMP).
5. INPUT, GUIDE, Channel (up/down), Volume (up/down) and REC button are not for CD devices.



① **PRECODED AUDIO Buttons**
These buttons transmit the chosen precoded Audio component codes.

② **EXCLUSIVE TV Buttons**
These buttons are for operating the TV.

MY AUDIO EQUIPMENT CODE IS:

CD _____

AMP/RCVR _____

NOTES:
1. The REC (Record) button only applies to some precoded amplifier/receiver codes.
2. Refer to instruction manual of the Audio equipment for operation of the buttons exclusively for the Audio equipment.

HOW TO USE THE REMOTE "ENT" BUTTON TO ACCESS THE SPECIFIED INPUT OF THE PLASMA TV

INPUT ACCESS

This optional feature allows the user of the remote control to setup it's ENTER (ENT) button to access the specified input of the TV. Setup for this feature is applicable to the remote control's normal mode only and only applies to the DVD, CBL, STB, PVR and AMP modes.

1. Select the desired device mode (DVD, CBL, STB, PVR, or AMP) by using your SOURCE ACCESS buttons (◄ or ►) to position the LED indicator to the corresponding selection.
2. Hold down the ENTER (ENT) button on the remote and enter the four digit preset code that matches your device as shown on pages 51-52.
3. Then enter the assigned input number (1-5) that the device is related to.
4. Release ENTER (ENT) button.
5. If done correctly, the device LED indicator will flash 3 times to confirm proper setup.
6. The remote will now control the desired device.
7. Pressing the ENTER (ENT) button will now access the video input (1-5) of the desired device.

SETUP EXAMPLE (Hitachi DVD with precode 0573 connected to INPUT 1 of the TV)

① Select DVD mode by using your SOURCE ACCESS buttons (◄ or ►) to position the LED indicator to DVD.

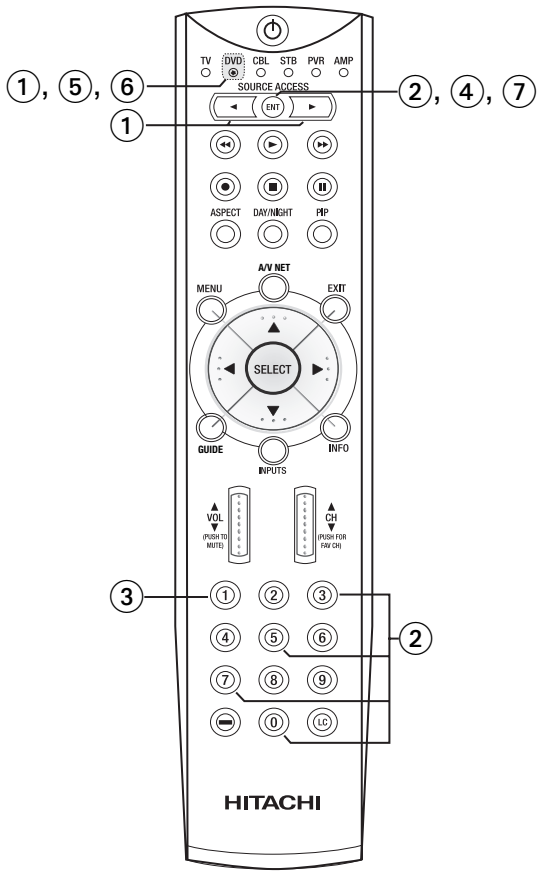
② Hold down the ENTER (ENT) button and press the numbers 0, 5, 7 and 3.

③ Then press the number 1 for the assigned input number of the DVD player.

④ Release ENTER (ENT) button.

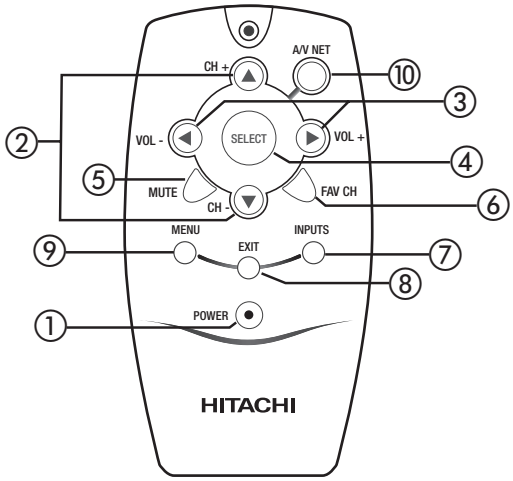
⑤ If done correctly, the device LED indicator will flash 3 times to confirm proper setup.

⑥ The remote will now control the DVD player.



NOTES: 1. This feature is optional.
2. Assigned input numbers can be used more than once if applicable.

HITACHI has provided a second remote control for your convenience. The Simple Remote Control has the basic features that are most often used.



① **POWER button**
Press Power button to turn the Plasma TV ON or OFF.

② **CH+ (▲) and CH- (▼)**
Press the CH+ (▲) up or CH- (▼) down buttons to select desired channel or to navigate the on screen display features when in AV NET mode.

③ **VOL- (◀) and VOL+ (▶)**
Press the VOL- (◀) down or VOL+ (▶) up buttons to select desired sound level or to navigate the on screen display features when in AV NET mode.

④ **SELECT button**
Press SELECT button to Select when in MENU and AV NET mode.

⑤ **MUTE button**
To reduce the sound to one half of normal volume (SOFT MUTE) to answer the telephone, etc., press the MUTE button. Press the MUTE button again to turn the sound off completely (MUTE). To restore the sound, press the MUTE button one more time, or press the VOLUME Up (▶) button.

⑥ **FAV CH button**
Press FAV CH button to access your favorite channels.

⑦ **INPUTS button**
Pressing the INPUTS button repeatedly will cycle through the input items (see example on page 35).

⑧ **EXIT button**
When in MENU mode, this button will exit all On-Screen Displays.

⑨ **MENU button**
Press the MENU button to start the On-Screen Display.

⑩ **AV NET button**
Press this button to access the Audio/Video network (AV Net) menu. The AV Net allows the user to control external components with the TV's remote control. (See complete explanation and example on pages 32-34)

NOTE: The Simple Remote cannot be programmed to control external components.

PVR/VCR, CABLE, SATELLITE, DVD AND AUDIO CODES FOR REMOTE CONTROL

VCR BRAND . . . . . CODE

ABS 1972
Admiral 0048, 0209
Adventura 0000
Aiko 0278
Aiwa 0000, 0037, 0307
Akai 0041, 0061, 0106
Alienware 1972
America Action 0278
American High 0035
Asha 0240
Audiovox 0037, 0278
Beaumark 0240
Bell & Howell 0104
Broksonic 0121, 0184, 0002, 0209, 0479
CCE 0072, 0278
Calix 0037
Canon 0035
Carver 0081
Cineral 0278
Citizen 0278, 0037
Colt 0072
Craig 0037, 0072, 0047, 0240, 0271
Curtis Mathes 0035, 0041, 0060, 0162
CyberPower 1972
Cybernex 0240
Daewoo 0278, 0045, 0561
Dell 1972
Denon 0042
Durabrand 0039, 0038
Dynatech 0000
Electrohome 0037
Electrophonic 0037
Emerex 0032
Emerson 0037, 0184, 000, 0121, 0043, 0209, 0002, 0278, 0061, 0208, 0212, 0479, 0561, 1593
Fisher 0104, 0047, 0066
Fuji 0033, 0035
Funai 0000, 1593
GE 0035, 0060, 0240, 0202, 0761
Garrard 0000
Gateway 1972
Go Video 0432, 0526
GoldStar 0037, 0038
Gradiente 0000, 0008
HI-Q 0047
HP 1972
Harley Davidson 0000
Harman/Kardon 0038, 0081
Harwood 0072
Headquarter 0046
Hewlett Packard 1972
Hitachi 0000, 0041, 0042, 0105
Howard Computers 1972
Hughes Network Systems 0042
iBuy Power 1972
JVC 0067, 0041, 0008
Jensen 0041
KEC 0037, 0278
KLH 0072
Kenwood 0041, 0067, 0038
Kodak 0035, 0037
LG 0037
LXI 0037
Lloyd's 0000, 0208
Logik 0072
MEI 0035
MGA 0043, 0240, 0061
MGN Technology 0240
MTC 0000, 0240
Magnasonic 0593
Magnavox 0035, 0081, 0563, 0000, 0039, 0593
Magnin 0240
Marantz 0081, 0035
Marta 0037
Matsushita 0035, 0162, 1162
Media Center PC 1972
Memorex 0035, 0162, 0037, 0048, 0039, 0047, 0240, 0000, 0104, 0209, 0046, 0307, 0479, 1037, 1162, 1262
Microsoft 1972
Mind 1972
Minolta 0042, 0105
Mitsubishi 0061, 0043, 0067
Motorola 0035, 0048
Multitech 0000, 0072
NEC 0038, 0041, 0067, 0104
Nikko 0037
Noblex 0240
Northgate 1972
Olympus 0035
Optimus 0593, 1062, 0162, 0037, 0048, 0104, 0432, 1048, 1162, 1262
Optonica 0062
Orion 0184, 0209, 0002, 0479
Panasonic . . . 0162, 1062, 0035, 0616, 1162, 1262
Penney 0035, 0037, 0240, 0042, 0038
Pentax 0042, 0105
Philco 0035, 0209, 0479, 0561
Philips 0081, 0035, 0618, 1081, 1181, 0062
Pilot 0037
Pioneer 0067
Polk Audio 0081
Profitronic 0240
Proscan 0060, 0202, 0761
Protec 0072
Pulsar 0039
Quarter 0046
Quartz 0046
Quasar 0035, 0162, 1162
RCA 0060, 0240, 0042, 0105, 0106, 0202, 0761, 0880
Radio Shack 0000, 1037
Radix 0037
Randex 0037
Realistic 0035, 0037, 0048, 0047, 0000, 0104, 0046, 0062, 0066
ReplayTV 0614, 0616
Runco 0039
STS 0042
Samsung 0045, 0240, 0432
Sanky 0039, 0048
Sansui 0000, 0067, 0209, 0041, 0479, 1479, 0271
Sanyo 0047, 0240, 0104, 0046
Scott 0184, 0045, 0121, 0043, 0210, 0212
Sears . . 0035, 0037, 0047, 0000, 0042, 0104, 1237, 0046, 0066, 0105
Semp 0045
Sharp 0048, 0848, 0062
Shintom 0072
Shogun 0240
Singer 0072
Sonic Blue 0614, 0616
Sony 0035, 0032, 0000, 0033, 0636, 1032, 1972
Sylvania 0035, 0081, 0000, 0043, 0593, 1593
Symphonic 0000, 0593, 1593
Systemax 1972
TMK 0240, 0208
Tagar Systems 1972
Tatung 0041
Teac 0000, 0041
Technics 0035, 0162
Teknika 0000, 0035, 0037
Thomas 0000
Tivo 0618, 0636, 1503
Toshiba 0045, 0043, 0066, 0210, 0212, 0366, 0845, 1008, 1145, 1503, 1972
Totevision 0037, 0240
Touch 1972
Unitech 0240
Vector 0045
Vector Research 0038
Video Concepts 0045, 0061
Videomagic 0037
Videosonic 0240
Viewsonic 1972
Wards . . 0060, 0062, 0035, 0048, 0047, 0081, 0240, 0000, 0042, 0072, 0212
White Westinghouse 0072, 0209
XR-1000 . . . . . 0072, 0000, 0035
Yamaha 0038
ZT Group 1972
Zenith 0039, 0000, 0209, 0033, 0479, 1479

DVD BRAND . . . . . CODE

AMW 0872
Aiwa 0641
Allegro 0869
Apex Digital . . 0672, 0717, 0755, 0794, 0796, 0797, 1004, 1020, 1056, 1061, 1100, 1915, 1937
Audiovox 0790, 1072
Axion 1072
Blaupunkt 0717
Blue Parade 0571
Brooksonic 0695
CAVS 1057
CineVision 0876, 0869
Classic 1917
Coby 1086
Curtis Mathes 1087
CyberHome 0816, 1023, 1024
DVD2000 0521
Daewoo 0784, 0705, 0833, 0869, 1918
Denon 0490, 0634
Dual 1068, 1085
Emerson 0591, 0675
Enterprise 0591
Fisher 0670
Funai 0675
GE 0522, 0717, 0815
GPX 0699, 0769
Gateway 1073
Go Video 0744, 0715, 0783, 0833, 0869, 1075
Gradiente 0651
Greenhill 0717
Grundig 0705
Harman/Kardon 0702
Hitachi 0573, 0664, 0695
Hiteker 0672
IRT 0783
Initial 0717
Integra 0627
Hiteker 0672
JBL 0702
JVC 0623, 0558, 0867, 1901
KLH 0717, 0790, 1020
Kawasaki 0790
Kenwood 0490, 0534
Koss 0651
Lasonic 0798
Lite-On 1058
Magnavox 0503, 0675, 1914, 1976
Marantz 0539
Memorex 0695
Microsoft 0522
Mintek 0717, 0839
Mitsubishi 0521, 1521
Nesa 0717
Norcent 1003, 0872
Onkyo 0627, 0503
Oritron 0651
Panasonic 0490
Philco 0790
Philips 0503, 0539, 0646, 0854
Pioneer 0525, 0571, 1902
Polaroid 1061, 1086
Polk Audio 0539
Proscan 0522
Qwestar 0651
RCA 0522, 0571, 0717, 0790, 0822, 1974
Recco 0698
Rio 0869
Rotel 0623
Rowa 0823
Sampo 0698, 0752
Samsung 0490, 0573, 0820, 0744, 1075
Sansui 0695
Sanyo 0670, 0695, 0873
Semp 0503
Sharp 0630, 0752
Shinsonic 0533, 0839
Sonic Blue 0869
Sony 0533
Sylvania 0675
Symphonic 0675
TYT 0705
Teac 0790
Technics 0490
Theta Digital 0571
Tivo 1996
Toshiba 0503, 0695, 1045, 1988, 1996, 2006
Tredex 0799, 0803
US Logic 0839
Urban Concepts 0503
Venturer 0790
XBox 0522
Yamaha 0490, 0545, 0539
Zenith 0591, 0503, 0869

CABLE BRAND . . . . . CODE

ABC . . . 0003, 0008, 0011, 0013, 0014, 0017
Allegro 0153, 0315
Americast 0899
Antronix 022
Archer 022, 0153, 0797
Bell & Howel 0014
Bell South 0899
Cabletenna 0022
Cableview 0022
Century 0153
Citizen 0153, 0315
ClearMax 0883
Clearmaster 0883
Colour Voice 0025, 0031
Comtronics 0040
Contec 0019
Coolmax 0883
Digi 0637
Director 0476
Dumont 0637
Emerson 0797
Everquest 0015, 0040
Focus 0400
Garrard 0153
Gemini 0015, 0797
General Instrument 0003, 0011, 0476, 0276, 0810
GoldStar 0040, 0144
Goodmind 0797
Hamlin 0009, 0020, 0034, 0273
Hitachi 0011
Jasco 0015, 0153, 0315
Jerrold 0003, 0011, 0012, 0014, 0015, 0024, 0276, 0476, 0810
Memorex 0000
Motorola 0276, 0476, 0810, 1106, 1254, 1376
Movie Time 0063
Multivision 0012

THE REMOTE CONTROL

NSC 0063
Novaplex 0618
Oak 0019
Optimus 0021
Pace 0237, 1877
Panasonic 0000, 0021, 0107
Panther 0637
Paragon 0000
Philips 0305, 0317
Pioneer 0023, 0025, 0031, 0153, 0144, 0533, 0877, 1877
Popular Mechanics 0400
Pulsar 0000
Quasar 0000
RCA 0021
RadioShack . . . 0015, 0315, 0797, 0883
Recoton 0400
Regal 0020, 0273, 0279
Rembrandt 0011
Runco 0000
SL Marx 0040
Samsung 0040, 0144
Scientific Atlanta 0877, 0008, 0017, 0477, 1877
Signal 0015, 0040
Signature 0011
Sony 1006
Sprucer 0021
Starcom 0003, 0015
Stargate 0015, 0040, 0797
Starquest 0015
Supercable 0276
Supermax 0883
TFC 0310
TV86 0063
Tandy 0258
TeleCaption 0221
Teleview 0040
Timeless 0040
Tocom 0012, 0013
Torx 0003
Toshiba 0000
Tristar 0883
Tusa 0015
Unika 0022, 0153
Universal 0022, 0153, 0191
V2 0883
ViewMaster 0883
Viewstar 0063, 0258
Vision 0883
Vortex View 0883
Zenith 0000, 0054, 0525, 0899
Zentek 0400

SATELLITE BRAND (Set-Top-Box) . . CODE

AlphaStar 0772
Amway 0043, 0075
Astro Industries 0095
BSR 0095
Cable Innovations 0554
Capetronic 0095
Century 0856
Channel Master 0018, 0212
Chapparral 0053, 0209, 0216
Conifer 0004
Crossdigital 1109
Curtis Mathes 061
DX Antenna 0041
DirecTV 0392, 0566, 0639, 1639, 1142, 0247, 0749, 1749, 0724, 0819, 1856, 1076, 1109, 0099, 1052, 1053, 1054, 1442, 1443, 1444
Dish Network System 1005, 0775, 1170
DishPro 1005, 0775
Drake 0018, 0064, 0245
Echostar 1005, 0775, 0148, 0269, 0280, 1170
Expressvu 0775
GE 0566
GOI 0775
General Instrument . . 0869, 0547, 0554
Gradiente 0856
HTS 0775
Hitachi 0819
homecable 0238
Hughes Network Systems 1142, 0749, 1749, 1442, 1443, 1444
Hytek 0095
IQ 0210
IQ Prism 0210
Innova 0099
Intersat 0043
JVC 0775, 1170
Janeil 0152
Legend 0269
Macom 0018, 0061
Magnavox 0724, 0722
Memorex 0724, 0269
Mitsubishi 0749
Motorola 0869
Netsat 0099
Next Level 0869
Norsat 0004
Pace 0455
Panasonic 0247, 0701, 0152
Paysat 0724
Philips 1142, 0749, 0724, 1076, 0722, 1749, 0856, 0099
Pico 0075
Proscan 0392, 0566
RCA 0392, 0566, 0855, 0143
Radioshack 0869, 0554
Ramsey 0075
Realistic 0052
SKY 0856, 1856, 0099
STS 0041, 0210
Samsung 1276, 1109
Sony 0639, 1639
Star Choice 0869
Star Trak 0180, 0421, 0547
Strong 0421
Tivo 1142, 1442, 1443, 1444
Toshiba 0749, 1749, 0790, 0061, 0082, 1052, 1053, 1054, 1285, 1286, 1287, 1289
Town & Country 0547
Uniden 0724, 0722, 0052, 0074, 0076, 0238, 0370, 0554
Zenith 0856, 1856, 0061, 0064

AMPLIFIER BRAND. . . . . CODE

Aiwa 0406
Bose 0674
Carver 0269
Curtis Mathes 0300
Denon 0160
Durabrand 1561
GE 0078
Harman/Kardon 0892
JVC 0331
Left Coast 0892
Lenoxx 1561
Linn 0269
Luxman 0165
Magnavox 0269
Marantz 0269, 0321, 0892
NEC 0264
Nakamichi 0321
Optimus 0395, 0300
Panasonic 0308, 0521
Parasound 0246
Philips 0269, 0892
Pioneer 0013, 0300
Polk Audio 0269, 0892
RCA 0300
Realistic 0395
Sansui 0321
Shure 0264
Sony 0815, 0689, 0220
Soundesign 0078, 0211
Technics 0308, 0521
Toshiba 0353
Victor 0331
Wards 0013, 0078, 0211
Yamaha 0354, 0133

RECEIVER BRAND (Amplifier) CODE

ADC 0531
Aiwa . . . 1405, 0121, 0158, 0189, 0405
Anam 1074, 1609
Arcam 1120
Audiotronic 1189
Bose 0639, 1229, 1253
Capetronic 0531
Carver 1189, 0042, 0189
Casio 0195
Clarinette 0195
Coby 1263
Compaq 1136
Curtis Mathes 0080
Dell 1383
Denon 0004, 1360
Fisher 0042
Garrard 0463
Glory Horse 1263
Harman/Kardon 0891, 0110, 0189
Hewlett Packard 1181
Hitachi 0228
Integra 0135
JBL 0110
JVC 0074, 1263
KLH 1428
Kenwood 1313, 1570, 1569, 0027, 0042, 0186, 0239
LXI 0181
Linn 0189
Lloyd's 0195
MCS 0039
Magnavox 1189, 1269, 0189, 0195, 0391, 0531
Marantz 1189, 0039, 0189, 1269
Mitsubishi 1393
Modulaire 0195
Musicmagic 1089
Nakamichi 0097
Onkyo 0135, 0842
Optimus 1023, 0042, 0080, 0177, 0181, 0186, 0219, 0531, 0670, 0738, 0801, 1074
Panasonic 1518, 0039, 0309, 0367
Penney 0195
Philips . . 1189, 1269, 0189, 0391, 1120
Pioneer 1023, 0014, 0080, 0150, 0244, 0531, 0630
Polk Audio 0189
Proscan 1254
Quasar 0039
RCA 1023, 1254, 0080, 0531, 1074, 1609
Radio Shack 1263
Realistic 0181, 0195
Rio 1383
Sansui 0189
Sanyo 0801, 1251
Scott 0163, 0322
Sharp 0186
Sharper Image 1263
Sherwood 0491, 0502
Sonic Blue 1383
Sony 1058, 1441, 1759, 0158, 0474, 1349, 1406, 1442
Soundesign 0670
Stereophonics 1023
Sunfire 1313
Teac 0463, 1074
Technics 1308, 1518, 0039, 0309
Thorens 1189
Toshiba 1572
Victor 0074
Wards 0014, 0080, 0158, 0189
Yamaha 0176, 0186, 1176
Yorx 0195
Zenith 0857

AUDIO BRAND . . . . . CODE

Aiwa 0010, 0159
AudioSource 0351
Cambridge Soundworks 0351
Carver 0351
Fisher 0052
Fosgate 0259
Harmon/Kardon 0477
JBL 0477
JVC 0073
KLH 0351
Magnavox 0325
Nikko 0376
Paramount Pictures 0317, 0351
RCA 0056
SSI 0317
Sansui 0325
Schneider 0376
Sony 0010, 0576
Soundesign 0376
Yorx 0376

SET TOP BOX BRAND . . . . . CODE

Panasonic 1120
Pioneer 1010
Princeton 0113, 0295
Samsung 1190
Sensory Science 1126
Sharp 1010
Sony 0639

PERSONAL VIDEO RECORDER BRAND . . . . . CODE

Panasonic 0616
Philips 0618
ReplayTV 0614, 0616
SonicBlue 0614, 0616
Sony 0636
Tivo 0618, 0636

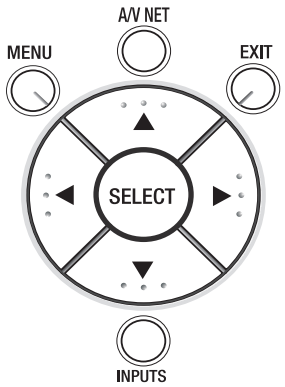
OSD (On-Screen Display)

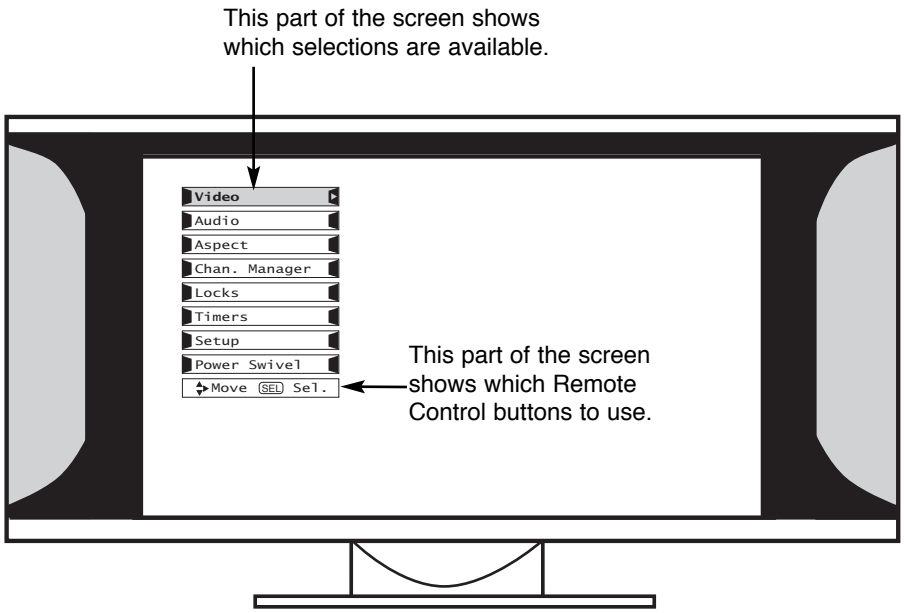
1. Press MENU on the remote control to display the different features on your HITACHI Plasma TV.

2. Use the CURSOR PAD (buttons ▲, ▼, ◄ and ►) to navigate to a different menu item.

3. Press EXIT on the remote control to quickly exit from a menu.

4. Press the A/V NET button on the remote control to access the AV Network menu to control external components.





Video

Picture Mode	Select between the two picture modes; Day and Night.
Contrast	Adjust contrast.
Brightness	Adjust brightness.
Color	Adjust color.
Tint	Adjust tint.
Sharpness	Adjust sharpness.
Color Temperature	Set this to High for less intense color with more blue, set to Medium for natural color, set to Standard for standard colors or Black and White for more reddish color.
Black Enhancement	Adjust shadow detail in dark screens.
Contrast Mode for	Use this function to choose between 3 Contrast Mode settings. Set to Dynamic for darker images more in the level of Black, set to Normal a balanced White to Black level, and set to Auto for automatic Contrast selection.
Reset Video Settings	Choose the Reset Video settings.
Noise Reduction	Reduces conspicuous noise in the picture.
Auto Movie Mode	Turn ON/OFF the 3:2 Pulldown detection feature.
Color Management	Adjust and balance individual colors to make either deeper or more pure according to preference.
Color Decoding	Adjust the percentage of Red, Green and Color according to preference.
Auto Color	The AUTO COLOR function automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes. It also maintains natural flesh tones while preserving fidelity of background colors.
White Balance	Use this function to adjust the dark end (Cutoff) and bright end (drive) of the White background.

Audio

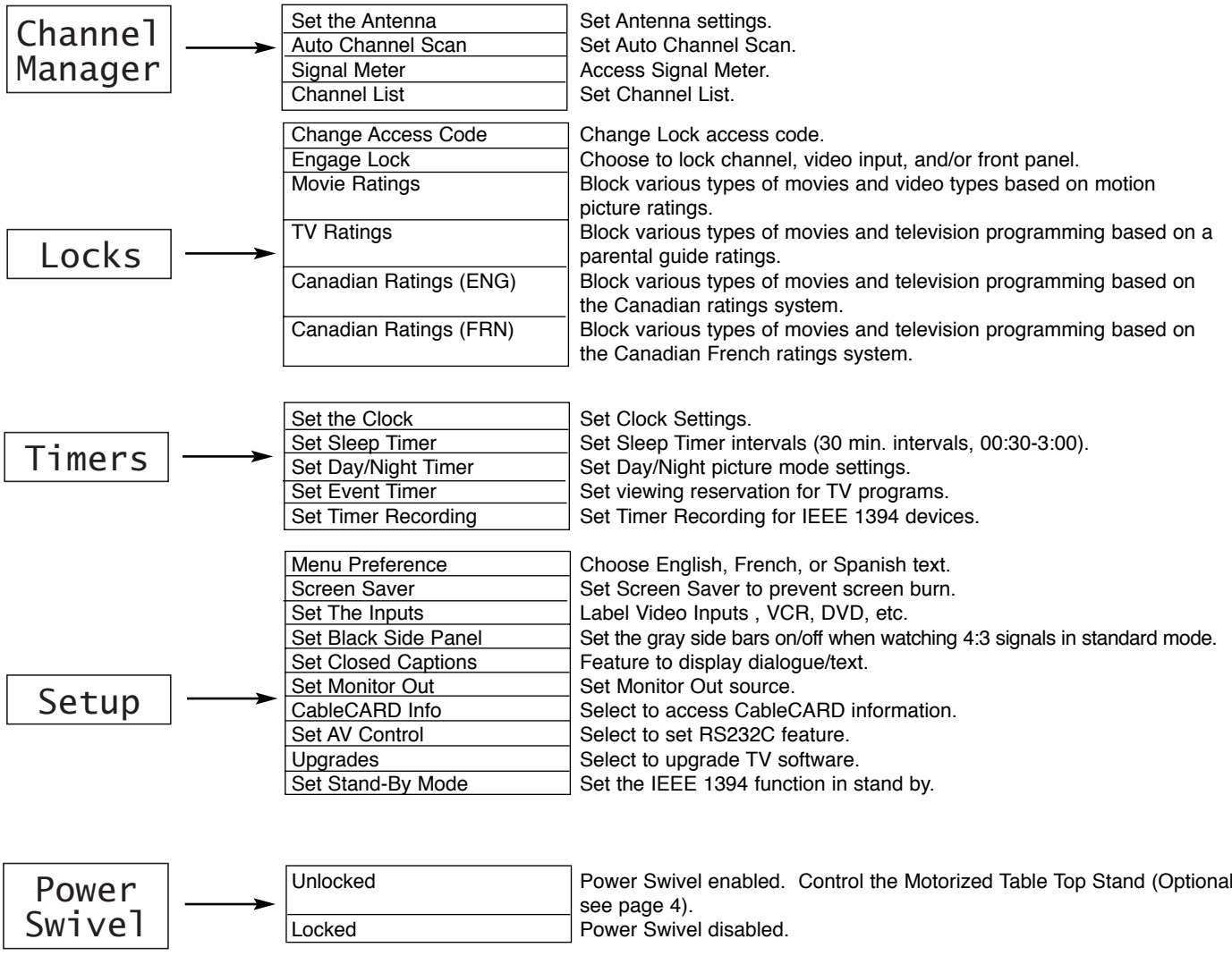
Treble	Adjust the treble.
Bass	Adjust the bass.
Balance	Adjust the balance.
SRS TruBass	Select SRS settings (Off, Wide, Normal).
Matrix Surround	Select Matrix Surround (On, Off).
Audio Source	Select between three Audio Sources.
Internal Speakers	Select internal or external speakers.
Auto Noise Cancel	Eliminates the noise between stations.
Perfect Volume	Adjust volume in fixed setting.
Language	Select Language options if available.
Digital Output	Select Optical Output options.
DRC	Select Dynamic Range Compression to ON or OFF.

Aspect

4:3 Standard	Choose the picture format aspect ratio.
4:3 Expanded	
4:3 Zoom 1	
4:3 Zoom 2	
16:9 Standard	
16:9 Zoom	

NOTE: The Language, Digital Output, and the Dynamic Range Compression feature of the Audio OSD are only available for Digital channels.

OSD (On-Screen Display)


Channel Manager
Set the Antenna
Auto Channel Scan
Signal Meter
Channel List
Set Antenna settings.
Set Auto Channel Scan.
Access Signal Meter.
Set Channel List.
Locks
Change Access Code
Engage Lock
Movie Ratings
TV Ratings
Canadian Ratings (ENG)
Canadian Ratings (FRN)
Change Lock access code.
Choose to lock channel, video input, and/or front panel.
Block various types of movies and video types based on motion picture ratings.
Block various types of movies and television programming based on a parental guide ratings.
Block various types of movies and television programming based on the Canadian ratings system.
Block various types of movies and television programming based on the Canadian French ratings system.
Timers
Set the Clock
Set Sleep Timer
Set Day/Night Timer
Set Event Timer
Set Timer Recording
Set Clock Settings.
Set Sleep Timer intervals (30 min. intervals, 00:30-3:00).
Set Day/Night picture mode settings.
Set viewing reservation for TV programs.
Set Timer Recording for IEEE 1394 devices.
Setup
Menu Preference
Screen Saver
Set The Inputs
Set Black Side Panel
Set Closed Captions
Set Monitor Out
CableCARD Info
Set AV Control
Upgrades
Set Stand-By Mode
Choose English, French, or Spanish text.
Set Screen Saver to prevent screen burn.
Label Video Inputs , VCR, DVD, etc.
Set the gray side bars on/off when watching 4:3 signals in standard mode.
Feature to display dialogue/text.
Set Monitor Out source.
Select to access CableCARD information.
Select to set RS232C feature.
Select to upgrade TV software.
Set the IEEE 1394 function in stand by.
Power Swivel
Unlocked
Locked
Power Swivel enabled. Control the Motorized Table Top Stand (Optional, see page 4).
Power Swivel disabled.

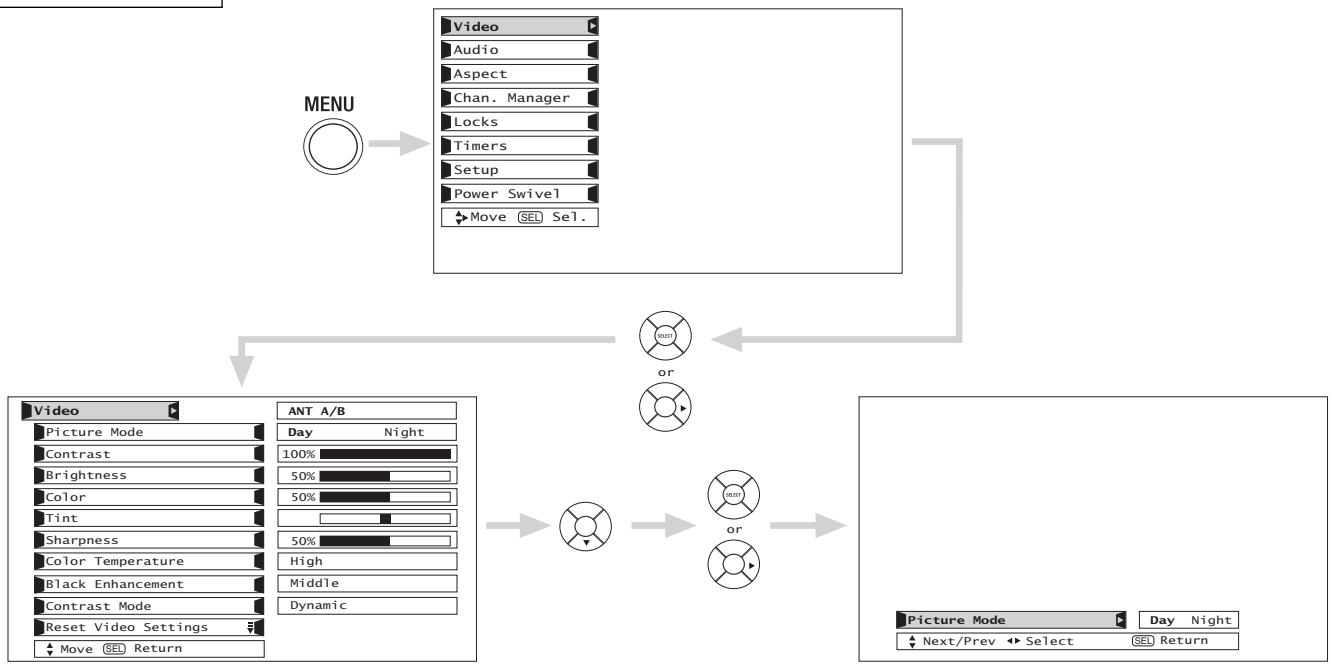
NOTES:
1. The Signal Meter feature of the Channel Manager OSD is only available for Digital signals.
2. The CableCARD information feature of the Setup OSD is only available when a CableCARD from your cable operator is installed in the rear panel of the Audio Video Control Center (AVC).
3. The Power Swivel feature is only available when the optional Table Top Stand is connected.

Video

Select VIDEO to adjust picture settings and improve picture quality. You can independently customize each of the Video Inputs to your preference to increase viewing performance and pleasure depending upon the video program being viewed. If RESET is selected, only the selected input will reset to initial conditions.

Picture Mode

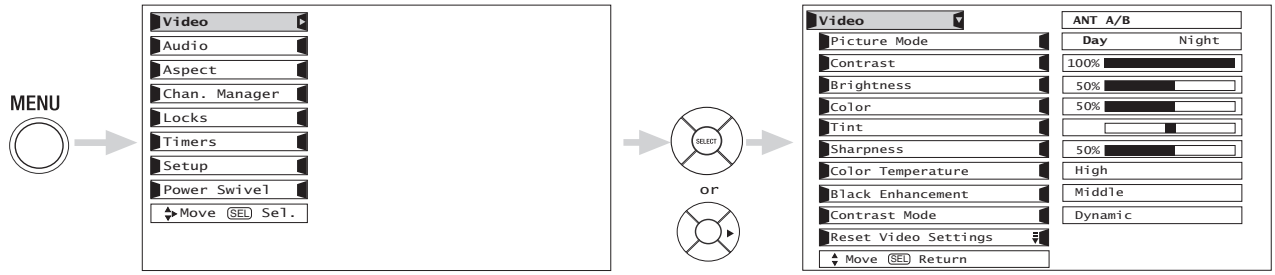
Use this function to choose from automatic picture settings to optimize your TV's performance.



Use CURSOR PAD ◄ or ► to highlight and select Picture Mode settings (Day or Night), then press the SELECT button to set the mode and return to the Video menu or press EXIT to quit menu.

Function	Day	Night	Reset
Contrast	100%	91%	Reset the video menu settings on current input automatically to Day Mode.
Brightness	50%	53%	
Color	50%	25%	
Tint	50%	50%	
Sharpness	50%	40%	
Color Temperature	50%	Standard	
Black Enhancement	Low	Low	
Contrast Mode	Dynamic	Normal	
Noise Reduction	Low	Off	
Auto Movie Mode (TV/Cinema Detection)	Off	On	
Color Management (Set User Colors)	Off	Off	
Auto Color	Off	Off	

VIDEO



Use the CURSOR PAD ▲ or ▼ to highlight the function to be adjusted.
Press the SELECT button or the CURSOR PAD ▶ to select the function settings.
Press the CURSOR PAD ◀ or ▶ to adjust the function.
Press MENU to return to main menu.
Press EXIT to quit menu.

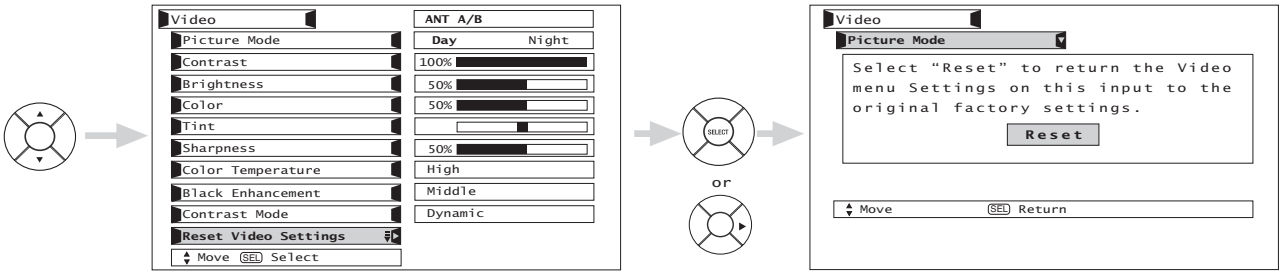
Contrast	Use this function to change the contrast between black and white levels in the picture.
Brightness	Use this function to adjust overall picture brightness.
Color	Use this function to adjust the level of color in the picture.
Tint	Use this function to adjust flesh tones so they appear natural.
Sharpness	Use this function to adjust the amount of fine detail in the picture.
Color Temperature	Set this to High for cooler color with more blue, set to Medium for more natural color, set to Standard for accurate color or set to Black/White for more reddish color.
Black Enhancement	Use this function to enhance the shadow detail in dark scenes using the settings off, low, middle and high.

NOTES: 1. If CONTRAST is selected, you are adjusting CONTRAST. The additional menu items BRIGHTNESS, COLOR, TINT, and SHARPNESS can be selected and adjusted in the same manner.
2. It may be necessary to adjust TINT to obtain optimum picture quality when using the COMPONENT VIDEO Y-P_BP_R input jacks.

Contrast Mode	Use this function to choose between 3 Contrast Mode settings. Set to Dynamic for darker images more in the level of Black, set to Normal for a balanced White to Black level, and set to Auto for automatic Contrast selection.

Reset Video Settings

This function allows you to Reset the Video Menu Settings of the present input and return it to the Day VIDEO mode.



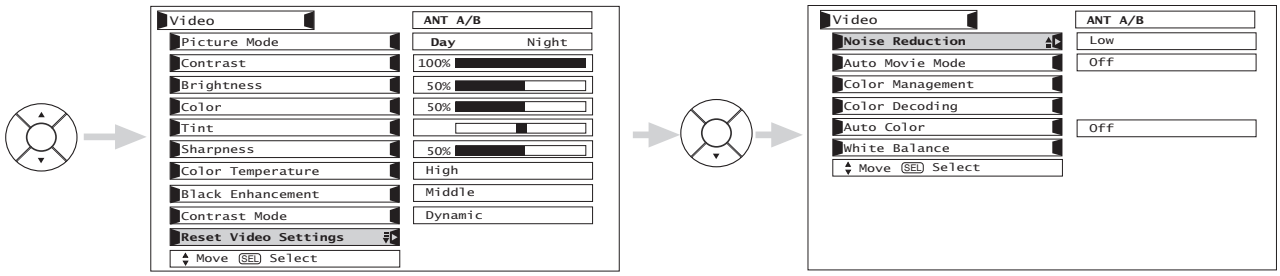
Use CURSOR PAD ▲ or ▼ to highlight functions.

Press the SELECT button or CURSOR PAD ▶ to select Reset Video Settings.

Use the CURSOR PAD ▼ to access at the Reset softkey.
Press the SELECT button to Reset the Video Settings.

You can customize each of the Video Inputs to your preference to increase viewing performance and pleasure, depending upon the video program being viewed. If RESET is selected, only the selected Input will reset to the initial conditions as explained above.

If RESET is selected in Video:1 Input, only Video:1 Input will return to factory conditions.



Noise Reduction

The NOISE REDUCTION function automatically reduces conspicuous noise in the picture without degrading picture quality. Set NOISE REDUCTION to OFF if the TV experiences picture blocking.

Auto Movie Mode

The Auto Movie Mode function turns ON or OFF the 3:2 PULLDOWN DETECTION SPECIAL FEATURE. Theatrical movies are shot on film at 24 frames or still pictures per second, instead of 30 frames or 60 fields like video. When film is transferred to video for television viewing, the disparity between the two frame rates must be reconciled. This involves a process known as 3:2 pulldown.

When Auto Movie Mode is turned ON from the VIDEO menu, your Hitachi Plasma Television will activate the circuitry for this special feature to improve video performance when watching film based sources.

NOTE: When using Progressive Scan Component or HDMI OR DVI input (Ex. 480p, 720p), Auto Movie Mode will not be available (grayed out). Please see table below for additional information.

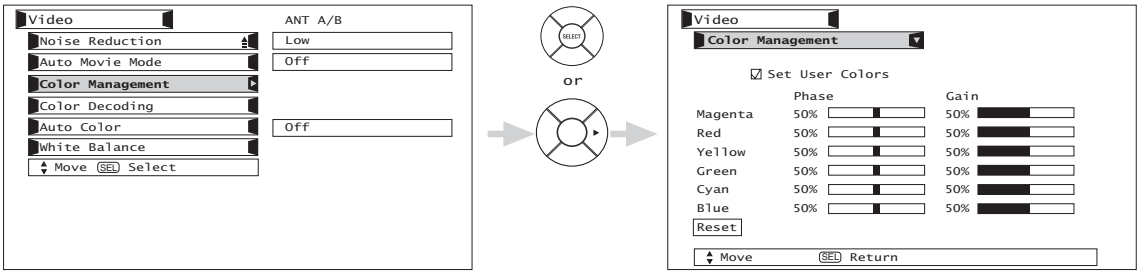
ANT A/B, VIDEO, 480i	480p/720p	1080i
AVAILABLE	GRAYED OUT	AVAILABLE

NOTES:
1. When using Progressive Scan Component, HDMI or DVI input (Ex. 480p, 720p, 1080i), Auto Movie Mode will not be available (grayed out).
2. All Video settings are independent of each other based on it's input (ANT A/B, Input 1~5, Photo Input).

VIDEO

Color Management

Use this function to adjust and balance the listed individual colors to make them either deeper or more pure depending on the user's preference. Adjust the GAIN settings to make the color brighter (+) or darker (-). Adjust the PHASE settings to make the colors deeper (+) or normal (-) to match real life colors.



Use CURSOR PAD ▲ or ▼ to highlight functions.

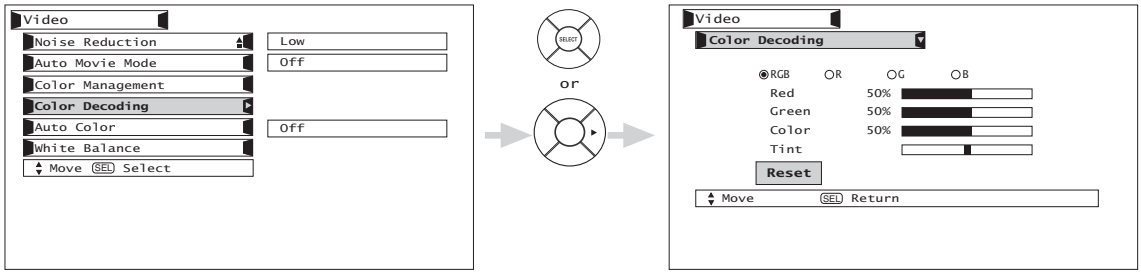
Press the SELECT button or CURSOR PAD ▶ to select User Colors setting. When the function has a "✓" in the box called "Set User Colors", it is ON.

Press the CURSOR PAD ◀, ▶, ▼, ▲ and SELECT button to highlight and adjust individual colors.

NOTE: When the Set User Colors box is not checked , the listed colors will be grayed out.

Color Decoding

Use this function to adjust and balance the percentage of Red, Green and Blue according to the user's preference in each of the four color temperature settings. Use TINT to adjust flesh tones so they appear natural.



Use CURSOR PAD ◀, ▶, ▼ and ▲ to highlight the function. RGB, R, G or B, press the SELECT button to select it.
Press down to select from 4 menu items.

Press CURSOR PAD ◀, ▶, ▼ and ▲ to highlight and adjust Red, Green, Color and Tint.
Use CURSOR PAD to highlight and select "Reset" to return all settings to default.

NOTE: Color Decoding settings are independently stored in each of the 4 Color Temperature settings.

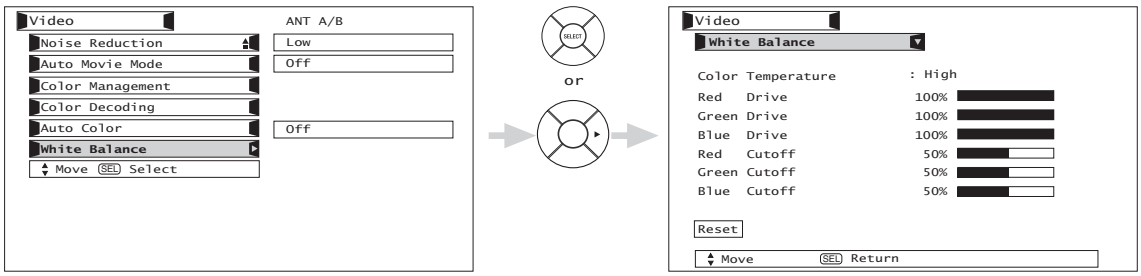
Auto Color

The AUTO COLOR function automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes. It also maintains natural flesh tones while preserving fidelity of background colors.

NOTE: When using Component or DVI-HDTV input, Auto Color will not be available (grayed out).

White Balance

Use the CUTOFF functions to adjust the color temperature of the dark areas of the picture.
Use the DRIVE functions to adjust the color temperature of the bright areas of the picture.

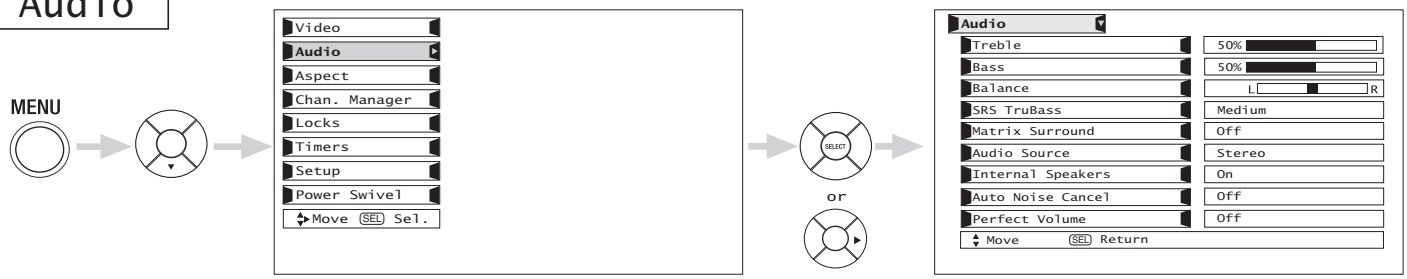


Use the CURSOR PAD ▲ or ▼ to highlight the choice.

Press the CURSOR PAD ◀ or ▶ to adjust.
Press the EXIT button to quit or select WHITE BALANCE to return to the previous MENU.

Audio

Select AUDIO to adjust the TV to your preference and to improve the sound quality.



Press CURSOR PAD ▲ or ▼ to select menu item.
Press CURSOR PAD ◄ or ► to adjust the function.
Press EXIT to quit the MENU, or select AUDIO to return to the main menu.

NOTE: If TREBLE is selected you are adjusting treble. The additional menu items Bass and Balance can be selected and adjusted in the same manner.

Treble This function controls the high frequency audio to all speakers.

Bass This function controls the low frequency audio to all speakers.

Balance This function will control the left to right balance of the Plasma TV internal speakers.

SRS TruBass

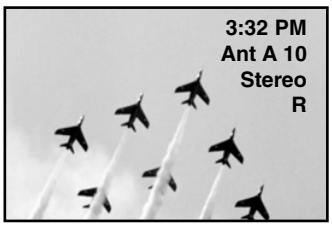
TruBass is an audio enhancement technology from SRS Labs that provides deep, rich bass on any speaker system without the need for a subwoofer or additional extra physical components. For systems with a subwoofer, TruBass complements and enhances the bass performance. This feature can be set to Off, Low, Medium and High.

NOTES: TruBass, SRS and the ((●)) ® symbol are trademarks of SRS Labs, Inc. TruBass technology is incorporated under license from SRS Labs, Inc.

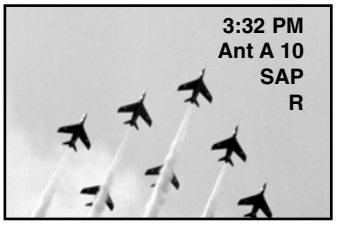
Matrix Surround The Matrix Surround features the spacious sound effects of a stadium that can be turned ON or OFF.

Audio Source Multi-Channel Television Sound will allow you to select STEREO (a stereo broadcast), MONO (monaural sound) used when receiving a weak stereo broadcast or 2nd Audio Prog (SAP) which may be a secondary language, weather report, etc. The sources received will be displayed at the top right edge of the TV. The source you select will be displayed above the sources received. See example below for each selection when both stereo and second audio are received (monaural is always received).

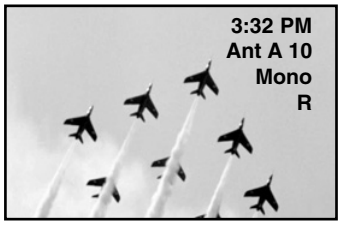
STEREO SELECTED



SAP SELECTED



MONO SELECTED



Internal Speakers This function is useful when setting up the external speakers. If you prefer to use only speakers from a separate stereo system, turn this feature OFF. When set to OFF, the Plasma TV speakers and the sub-woofer output are OFF. Also, set to OFF, if you prefer to use only your head-phones.

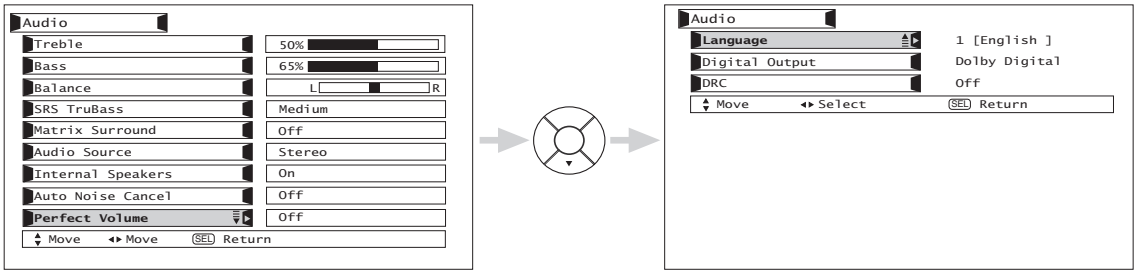
Auto Noise Cancel This function eliminates the noise between stations. If a channel is tuned and is noisy, this function will automatically eliminate the audio for that channel.

Perfect Volume This function will automatically adjust volume so each channel and input has the same average volume level.

ON-SCREEN DISPLAY

AUDIO

Use the functions below if your TV is connected to an amplifier/receiver with optical digital input with Dolby Digital or PCM decoder capabilities.



Language Some programs transmit more than one DTV language option. Most will have English as a default language. The language function will allow you to select up to 4 language options (if available).

Digital Output This function allows you to select between Dolby® Digital and PCM.

Dolby® Digital - Select this feature if the TV is connected to an amplifier/receiver with a Dolby® Digital only decoder; it will provide six independent soundtrack channels through the optical output jack (Digital Audio).

PCM - Select this feature if the TV is connected to an amplifier/receiver with a PCM only decoder; it will provide two independent soundtrack channels through the optical output jack (Digital Audio).

*Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

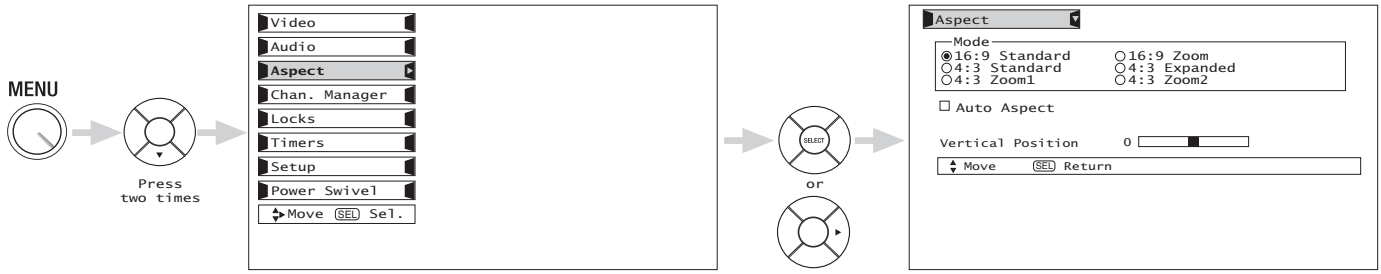
DRC Dynamic Range Compression - Use this function to compress the range of sound volume. By compressing the range of sound volume, it is possible not only to suppress the output of loud sound at night but also to raise the volume of low sound. This is only effective when the TV is connected via the optical out (digital audio) to an amplifier/receiver with a Dolby® Digital decoder. The default setting is ON.

Use the CURSOR PAD ◄, ► to select the chosen options.

NOTE: The functions Language, Digital Output and DRC are only available when viewing digital programs.

Aspect Use this function to select the Picture Format Aspect Ratio.

Press CURSOR PAD ◄, ►, ▼ and ▲ to choose the aspect ratio that are enclosed in the Mode window.
Press SELECT button to select the Mode setting.



Auto Aspect
Automatically adjust the Aspect Ratio depending on the input signal to fill the screen.

Press CURSOR PAD ▲ or ▼ to select menu item.
Press the SELECT button to select. A "✓" in the box indicates that the feature is ON.

NOTES: 1. The Auto Aspect function is recommended on an input signal with VIDEO ID.
2. The Auto Aspect function is best used on composite video, S-Video, and 480i component signals.
3. See page 30 for Aspect Mode availability.

Vertical Position
This function allows you to select when aspect style is either 4:3 EXPANDED/ZOOM1/ZOOM2 or 16:9 ZOOM. Vertical position can be changed with these modes. For example, it will be useful for centering the picture area at both the top and bottom of the picture with 480i/480P signal. Adjustable range is -10 (video center is toward bottom of screen) to +10 (video center is toward top of screen).

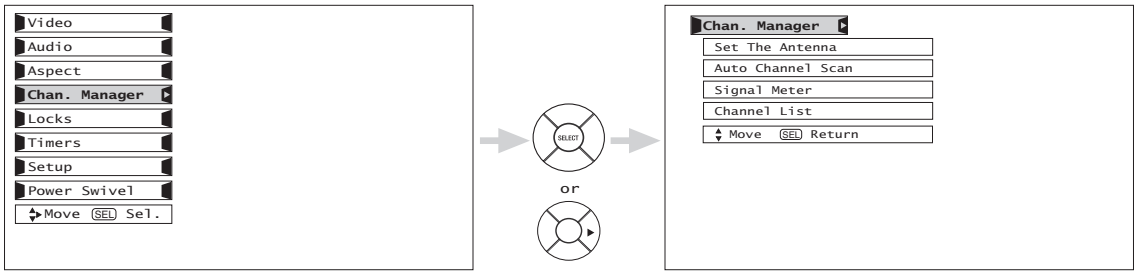
Press CURSOR PAD ▲ and ▼ to select menu item.
Press CURSOR PAD ◄ or ► to adjust the function.
Press EXIT to quit the MENU, or select ASPECT to return to the main menu.

NOTE: Vertical Position will not be available in 4:3 Standard and 16:9 Standard modes.

CHANNEL MANAGER

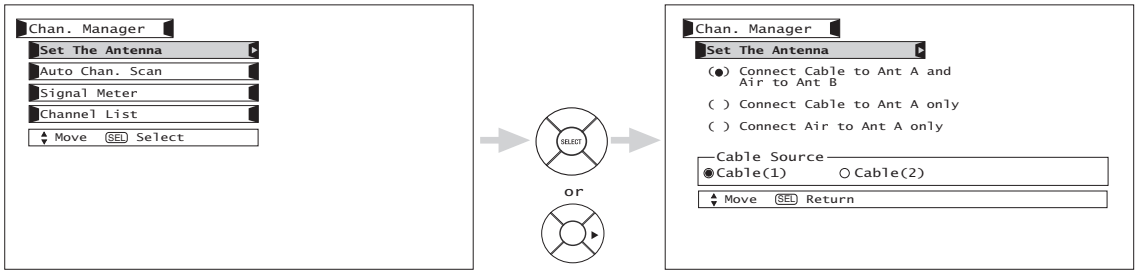
Chan. Manager

Select Channel Manager to set your Antenna options, run Auto Channel Scan, Check Signal Meter and Set Channel List.



Press CURSOR PAD ▲, ▼ to highlight function, then press the SELECT button or CURSOR PAD ▶ to select.

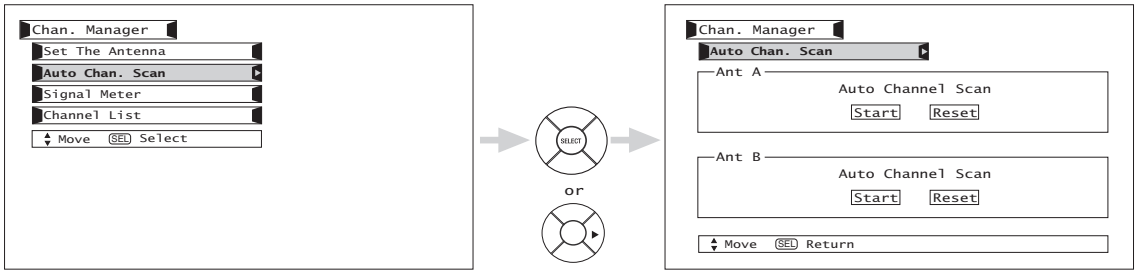
Set The Antenna This feature will select Antenna options.



Press CURSOR PAD ▲, ▼ to highlight function, then press the SELECT button to select.
Press the EXIT button to quit or select SET THE ANTENNA to return to the previous MENU.

NOTE: When a CableCARD is installed, antenna settings will be set automatically to “Connect Cable to Ant A only”.

Auto Channel Scan This feature will automatically store active Analog and Digital channels in Auto Channel Scan memory.

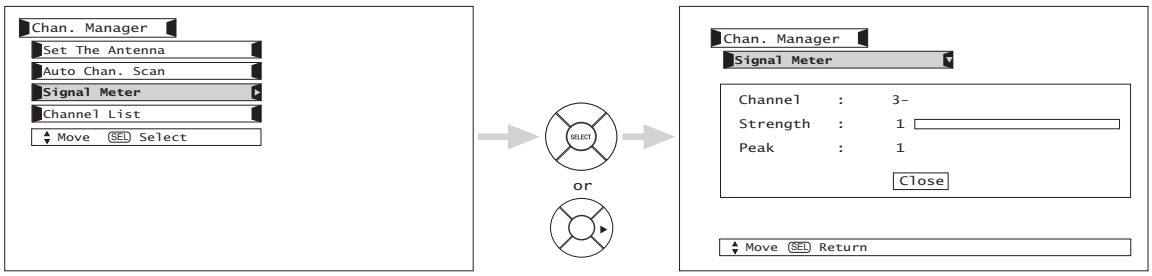


Press CURSOR PAD ▲ or ▼ to highlight Ant A or Ant B.
Press CURSOR PAD ◀ or ▶ to highlight the Start or Clear option.
Press the SELECT button to start Auto Channel Scan.

NOTE: When a CableCARD is installed, Auto Channel Scan will not be available since channels will be fixed based on what was agreed upon by you and your cable operator.

Signal Meter

Select Signal Meter when using an indoor or outdoor antenna. This feature will show the signal strength and peak values of the Antenna signal to help you adjust your antenna to optimize signal reception.

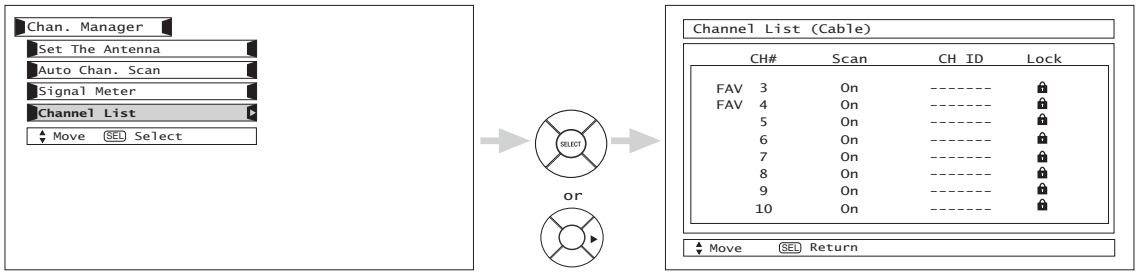


Use the CURSOR PADS and the SELECT button to highlight and select “close” to exit.

NOTE: The Signal Meter will not be available (grayed out) when watching analog channels.

Channel List

This function allows you to review which channels are labeled (CH ID), which have been added to Channel Memory (SCAN), which are protected by LOCK and which are your Favorite (FAV) Channels.



Use the CURSOR PADS to navigate the Channel List.

Press the CURSOR PAD (▲ or ▼) to select On or Off on the Scan column.

Press the EXIT button to return to normal viewing.

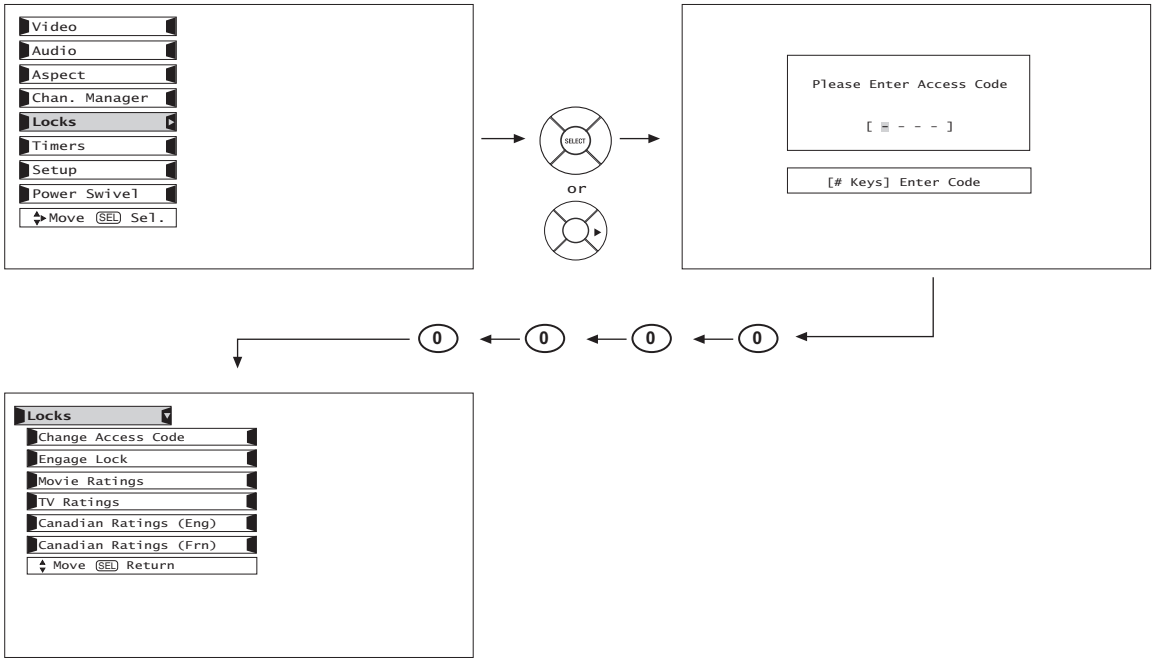
NOTE: When a CableCARD is installed, the Channel List will be dependent on channels agreed upon by you and your cable operator.

LOCKS

Locks

This function will block out the picture and sound of the selected channel or video input.
It can also be used to keep the TV from being viewed for a scheduled time period that you set.

The code to enter the Locks feature is a four digit access code number. The factory preset code is 0000.
Use the number buttons to enter the access code.



Use the CURSOR PAD ▲ or ▼ to highlight function and then press the SELECT button or CURSOR PAD ▶ to select some option of the LOCKS menu.
To change the access code number, select CHANGE ACCESS CODE. Enter a new four digit number.

Select CHANGE ACCESS CODE to change the factory preset code (0000) to your preference.

When ENGAGE LOCK is selected, SET CHANNEL LOCK, SET INPUT LOCK, and SET FRONT PANEL LOCK can be set individually.

When SET CHANNEL LOCK is turned on (when option box is checked "✓"), the picture and sound for the chosen channel will be blocked out.

When SET INPUT LOCK is turned on (when option box is checked "✓"), the picture and sound for all video inputs and the picture and sound for channels 3, 4 will be blocked out.

When FRONT PANEL LOCK is turned on (when option box is checked "✓"), all buttons on the Front Panel will be deactivated, except the Power button.

When MOVIE RATINGS is selected, you can block various types of movies and video tapes based on motion picture ratings. Picture-in-Picture will also be blocked automatically (see page 66).

When TV RATINGS is selected, various types of television programming based on a parental guide ratings will be blocked. Picture-in-Picture will also be blocked automatically (see page 67).

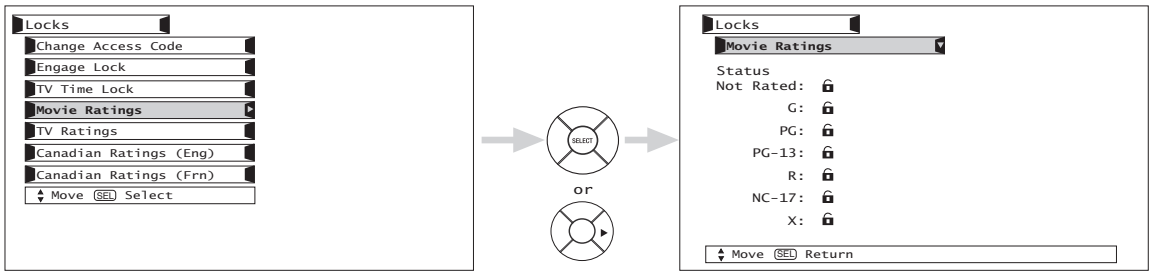
Use CANADIAN RATINGS to block various types of movies and television programs based on the two rating systems used in Canada that you feel may be inappropriate due to its content (see pages 68-69).

If you forget your access code, use the factory code 7777 to erase your key number. This will reset the access code number back to the factory preset 0000.
Press EXIT to quit the menu.

NOTE: If MOVIE/TV Ratings Lock function settings are ON, SURF will be deactivated.

Movie Ratings

Use MOVIE RATINGS to prevent viewing of any movie that you feel may be inappropriate due to its content.



Use the CURSOR PAD ▲ or ▼ to select the MOVIE RATING category that you want to block.

Press SELECT to block the MOVIE RATING that you have selected. Once rating is selected, for example PG-13, all movies rated PG-13 and higher (R, NC-17, and X) will be blocked.

Motion Picture Ratings Table

NOT RATED	**Contains no rating. Not Rated (NR) and Not Applicable (NA) programs.** Movie has not been rated or ratings do not apply.
G	**General audiences.** All ages admitted.
PG	**Parental guidance suggested**. Some material may not be suitable for children.
PG-13	**Parents strongly cautioned**. Some material may be inappropriate for children under 13.
R	**Restricted**. Under 17 requires accompanying parent or adult guardian.
NC-17	**No one 17 and under admitted.**
X	**Adults only**

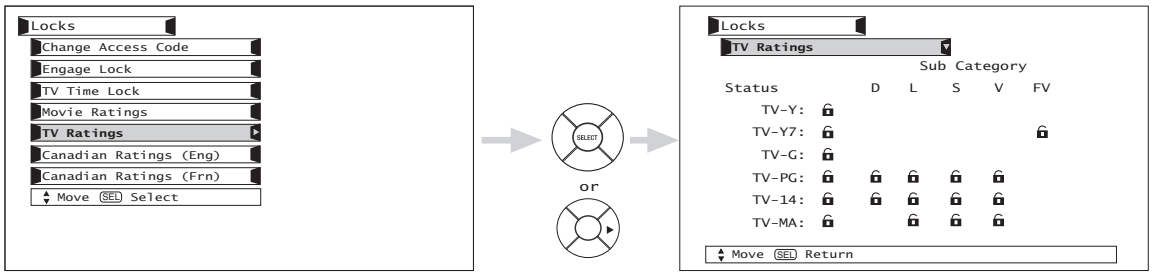
NOTES:

1. A movie rating is dependent upon the movie that is viewed. If the movie does not carry a rating, the TV will not block it.
2. Blocking “NOT RATED” programs may block emergency programming, sports, news, public service announcements, religious programs and weather.
3. If a CableCARD is installed, your cable operator may provide an Emergency Alert System (EAS) message in the event of a local or national emergency with the purpose of alerting the general public. When you receive such messages, the Projection Television will immediately tune to an EAS channel as directed by the EAS message. Please be advised that if the EAS channel is blocked using the Locks feature, you will not be able to tune to that channel.

LOCKS

TV Ratings

Use TV RATINGS to prevent the viewing of any TV program that you feel may be inappropriate due to its content.



Use the CURSOR PAD ▲, ▼, ◀ and ▶ to highlight the category that you want to block.
Press select to block the TV RATINGS that you have selected.

Press EXIT to quit the menu or select TV RATINGS to return to the previous menu.

TV Parental Guide Ratings Table

TV-Y	**All children.** The themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6.
TV-Y7	**Directed to older children.** Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7.
TV-G	**General audience.** It contains little or no violence, no strong language, and little or no sexual dialogue or situations.
TV-PG	**Parental guidance suggested.** The program may contain infrequent coarse language, limited violence, some suggestive sexual dialogue and situations.
TV-14	**Parents strongly cautioned**. This program may contain sophisticated themes, intense sexual situation, more intense violence and intensely suggestive dialogue.
TV-MA	**Mature audiences only.** This program may contain mature themes, indecent language, graphic violence, and explicit sexual content.
FV	**Fantasy Violence**
V	**Violence**
S	**Sexual Situation**
L	**Adult Language**
D	**Sexually Suggestive Dialogue.**

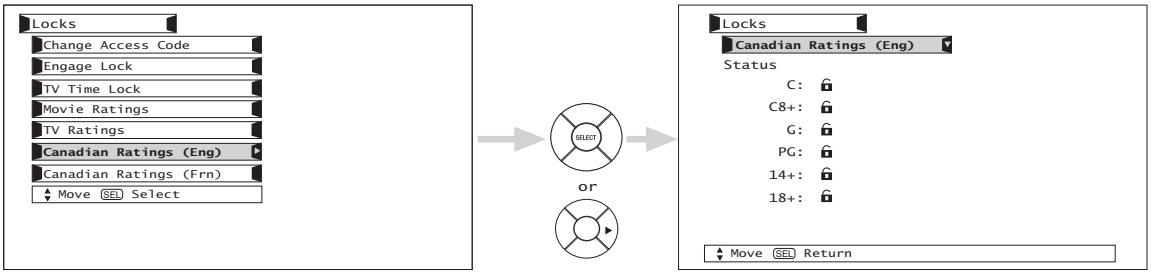
NOTES:

1. If you Block TV-14D, you will still permit TV MA programs; If you block TV-14V, you will automatically block TV-MAV programs, but you will still permit TV-MALS programs. This means that the TV will block violence in TV-14 and higher (TV-MA), but not language and sex.
2. TV program ratings are dependent on the broadcaster. If the program is not rated, the TV will not block it.
3. If a CableCARD is installed, your cable operator may provide an Emergency Alert System (EAS) message in the event of a local or national emergency with the purpose of alerting the general public. When you receive such messages, the Projection Television will immediately tune to an EAS channel as directed by the EAS message. Please be advised that if the EAS channel is blocked using the Locks feature, you will not be able to tune to that channel.

LOCKS

Canadian Ratings (Eng)

Use Canadian Ratings (ENG) to block any type of movie and television program in Canada that you feel might be inappropriate in its content.



Use the CURSOR PAD ▲ or ▼ to select the CANADIAN RATINGS (ENG) category that you want to block.

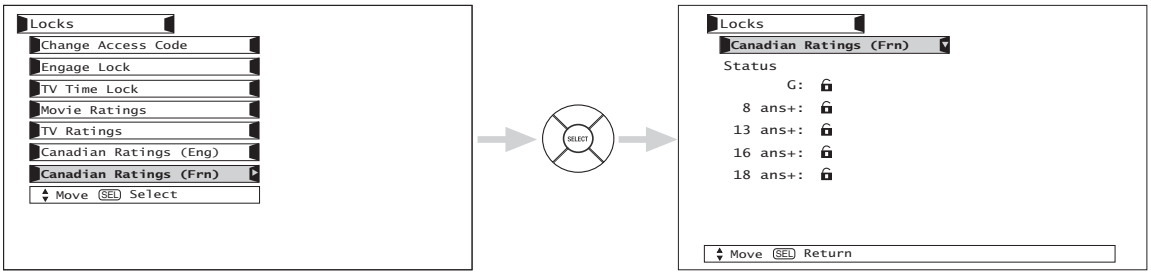
Press SELECT to set the CANADIAN RATINGS (ENG) that you have selected. Once rating is selected, for example C8+, all movies and television programs rated C8+ and higher (G, PG, 14+ and 18+) will be blocked automatically. Press EXIT to quit menu or select CANADIAN RATINGS (ENG) to return to the previous menu.

Canadian Ratings English Table

C	**Programming intended for children under age 8 -** Violence Guidelines; Careful attention is paid to themes, which could threaten children's sense of security and well-being. There will be no realistic scenes of violence. Depictions of aggressive behaviour will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature. Other Content Guidelines: There will be no offensive language, nudity or sexual content.
C8+	**Programming generally considered acceptable for children 8 years and over to watch on their own -** Violence Guidelines: Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict; or encourage children to imitate dangerous acts which they may see on television. Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. Other Content Guidelines: There will be no profanity, nudity or sexual content.
G	**General Audience -** Violence Guidelines: Will contain very little violence, either physical or verbal or emotional. Will be sensitive to themes which could frighten a younger child, will not depict realistic scenes of violence which minimize or gloss over the effects of violent acts. Other Content Guidelines: There may be some inoffensive slang, no profanity and no nudity.
PG	**Parental Guidance -** Programming intended for a general audience but which may not be suitable for younger children. Parents may consider some content inappropriate for unsupervised viewing by children ages 8-13. Violence Guidelines: Depictions of conflict and/or aggression will be limited and moderate; may include physical, fantasy, or supernatural violence. Other Content Guidelines: May contain infrequent mild profanity, or mildly suggestive language. Could also contain brief scenes of nudity.
14+	**Programming contains themes or content which may not be suitable for viewers under the age of 14 -** Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. Violence Guidelines: May contain intense scenes of violence. Could deal with mature themes and societal issues in a realistic fashion. Other Content Guidelines: May contain scenes of nudity and/or sexual activity. There could be frequent use of profanity.
18+	**Adult -** Violence Guidelines: May contain violence integral to the development of the plot, character or theme, intended for adult audiences. Other Content Guidelines: May contain graphic language and explicit portrayals of nudity and/or sex.

Canadian Ratings (Frn)

Use CANADIAN RATINGS (FRN) to block Canadian French programs according to various program ratings that you feel might be inappropriate in its content.



Use the CURSOR PAD ▲ or ▼ to highlight the category that you want to block.

Press SELECT to set the CANADIAN RATINGS (FRN) that you have selected.

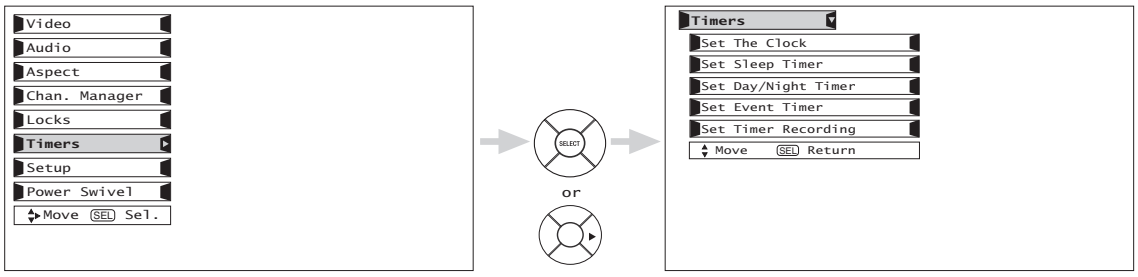
Once rating is selected, for example 8 ans+, all movies and television programs rated 8 ans+ and higher will be automatically blocked.

Press EXIT to quit menu or select the CANADIAN RATINGS (FRN) to return to the previous menu.

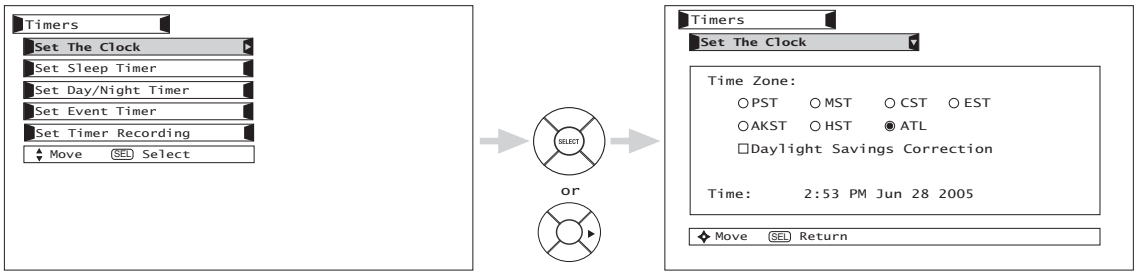
Canadian Ratings French Table

G	**General -** Programming intended for audiences of all ages. Contains no violence, or the violence content is minimal or is depicted appropriately with humor or caricature or in an unrealistic manner.
8 ans +	**8 + General - Not recommended for young children -** Programming intended for a broad audience but contains light or occasional violence that could disturb young children. Viewing with an adult is therefore recommended for young children (under the age of 8) who cannot differentiate between real and imaginary portrayals.
13 ans +	**Programming may not be suitable for children under the age of 13 -** Contains either a few violent scenes or one or more sufficiently violent scenes to affect them. Viewing with an adult is therefore strongly recommended for children under 13.
16 ans +	**Programming is not suitable for children under the age of 16 -** Contains frequent scenes of violence or intense violence.
18 ans +	**Programming restricted to adults -** Contains constant violence or scenes of extreme violence.

Timers Select Timers to set your Clock, Sleep Timer, Event Timer and Day/Night Timer Recordings.



Set The Clock The Clock must be adjusted before you can use the “Set Event Timer” or Day/Night Timer” feature.



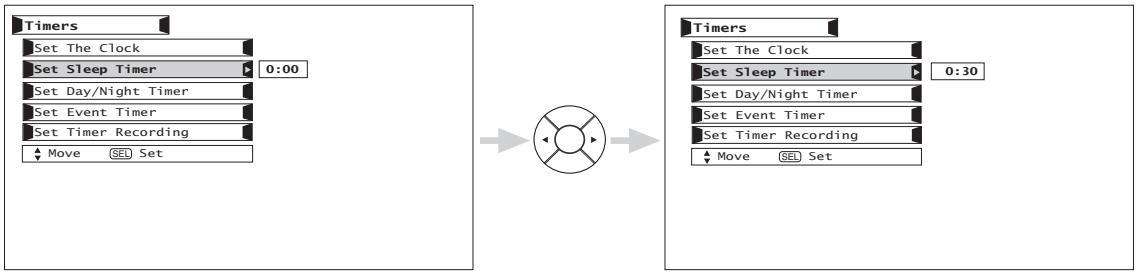
Use the CURSOR PAD ▲, ▼, ◄ and ► to highlight the chosen Time Zone settings.
Press the SELECT button to select.
If you observe daylight savings, use CURSOR PAD to highlight “Daylight Saving Correction” and press the SELECT button to select.

Use the CURSOR PAD ▲, ▼, ◄ and ► to highlight the current time (hour and minute), AM or PM, Month, Day, and Year.
Use the CURSOR PAD ▲, ▼ to adjust settings.
Press the SELECT button to set the Time and Date.
Press EXIT to quit the menu or select SET THE CLOCK to return to the previous menu.

NOTES: When “Daylight Savings Correction” is checked “✓”, the TV will automatically calculate the clock adjustment for Daylight Savings.

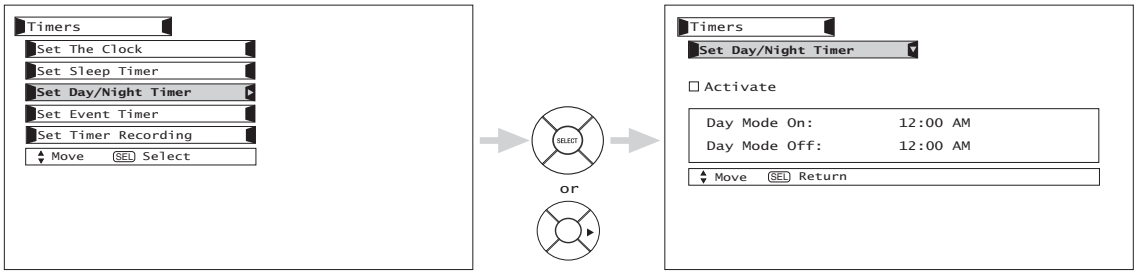
TIMERS

Set Sleep Timer Select this feature to set your Sleep Timer from 30 minutes to 3 hours (30 minute increments).



Press the CURSOR PAD ◀ or ▶ repeatedly to set your Timer from 0:00, 0:30, 1:00, 1:30, 2:00, 2:30 and 3:00.

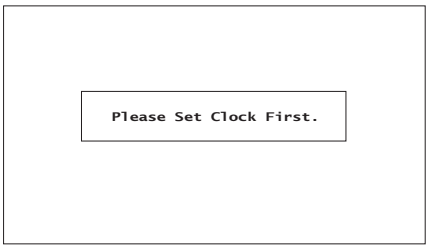
Set Day/Night Timer Select this feature to activate and set your TV's Day/Night Picture Mode automatically.

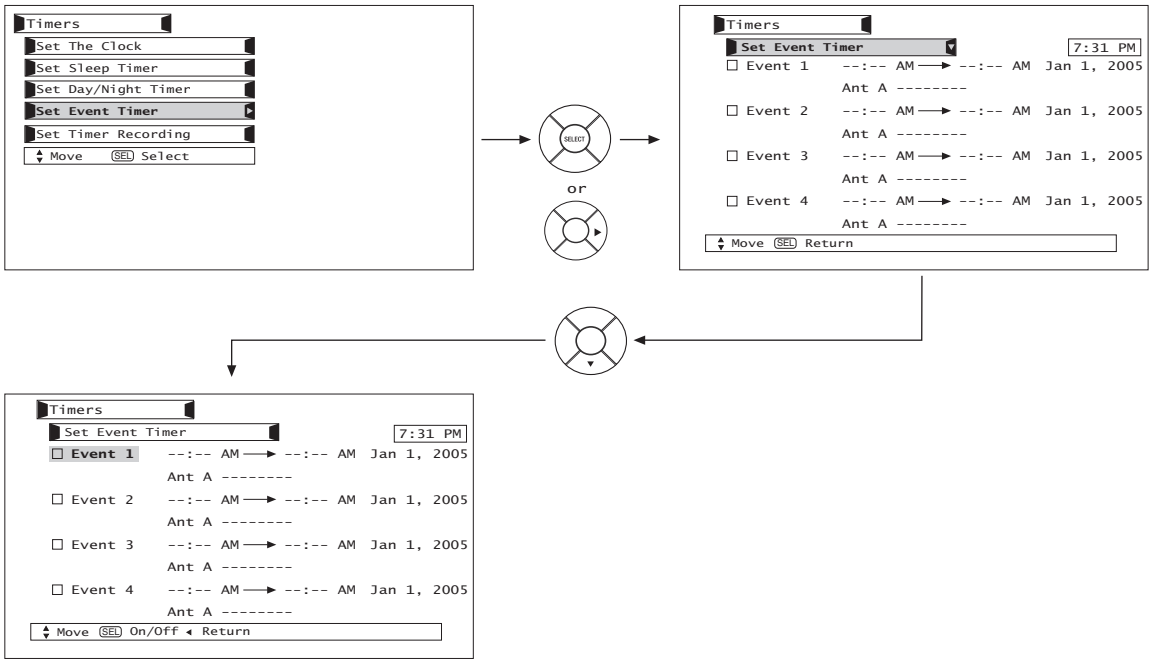


Use the CURSOR PADS and the SELECT button to activate the Day/Night Timer.
Use the CURSOR PADS to select Day Mode On and to set it's timer.
Use the CURSOR PADS to select Day Mode Off and to set it's timer.
Press EXIT to quit the menu or select SET DAY/NIGHT TIMER to return to the previous menu.

Set Event Timer

This function will automatically operate the TV viewing reservation of a program. If the clock is not set, you can not use this function and the screen below will appear. The message on the screen will disappear after 3 seconds, then the screen automatically goes to the clock setup mode (see page 70).




Timers
Set The Clock
Set Sleep Timer
Set Day/Night Timer
Set Event Timer
Set Timer Recording
Move SEL Select
SELECT
or
Timers
Set Event Timer
7:31 PM
Event 1 --:-- AM --:-- AM Jan 1, 2005
Ant A --------
Event 2 --:-- AM --:-- AM Jan 1, 2005
Ant A --------
Event 3 --:-- AM --:-- AM Jan 1, 2005
Ant A --------
Event 4 --:-- AM --:-- AM Jan 1, 2005
Ant A --------
Move SEL Return
Timers
Set Event Timer
7:31 PM
Event 1 --:-- AM --:-- AM Jan 1, 2005
Ant A --------
Event 2 --:-- AM --:-- AM Jan 1, 2005
Ant A --------
Event 3 --:-- AM --:-- AM Jan 1, 2005
Ant A --------
Event 4 --:-- AM --:-- AM Jan 1, 2005
Ant A --------
Move SEL On/Off Return

Use CURSOR PAD ▲ or ▼ to highlight Event 1, Event 2, Event 3 or Event 4.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select START TIME Hour/Minute.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select START TIME AM/PM.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select FINISH TIME Hour/Minute.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select FINISH TIME AM/PM.

Use CURSOR PAD ▶ to highlight the MONTH.

Use CURSOR PAD ▲ to select a MONTH or CURSOR PAD ▼ to select Daily, Weekly - Sunday to Monday. Use CURSOR PAD ▲ to return to MONTH.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select the DAY of the MONTH.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select the YEAR.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select Ant A or Ant B.

Use CURSOR PAD ▶, ▲ and ▼ or NUMBER buttons to set the channel the TV will tune into. Press SELECT two times to return and enable the event timer that you adjust.

A "✓" in the box means it is enabled.

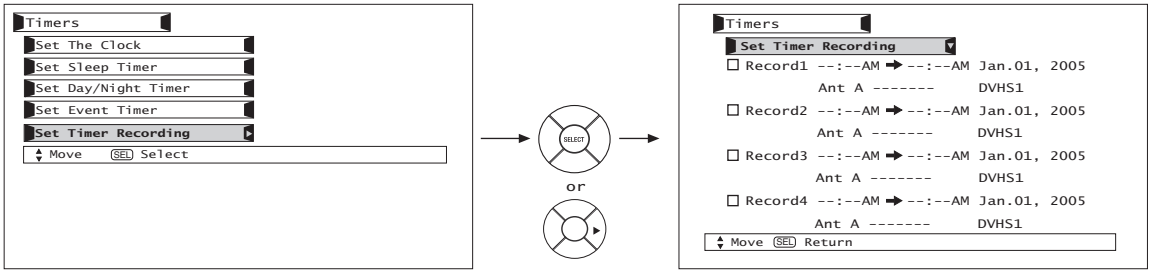
NOTE:
1. When the INFO button is pressed, the Event Timer Icon will only display the current date ON/OFF timer.
2. The Off Timer will only activate if the TV was turned on by the On Timer and no channel selection was made after this time. If you change the channel after the On Timer has been activated, the Off Timer will deactivate.
3. If no remote control button is pressed after viewing reservation is activated, the TV will automatically turn off after three hours. Therefore, do not Set Event Timer for more than three hours if you do not plan to control your television with the remote control.

CAUTION: Do not use your TV as a deterrent when away from home by using the On and Off Timers. For safety, the TV should be turned off when you are away from home.

TIMERS

Set Timer Recording

Select this feature to set and record digital channels using your device connected to the IEEE 1394 jacks (ex. D-VHS).



Use CURSOR PAD ▲ or ▼ to highlight Record 1, Record 2, Record 3 or Record 4.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select START TIME Hour/Minute.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select START TIME AM/PM.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select FINISH TIME Hour/Minute.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select FINISH TIME AM/PM.

Use CURSOR PAD ▶ to highlight the MONTH.

Use CURSOR PAD ▲ to select a MONTH or CURSOR PAD ▼ to select Daily, Weekly - Sunday to Monday. Use CURSOR PAD ▲ to return to MONTH.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select the DAY of the MONTH.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select the YEAR.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select ANT C channel # to be recorded.

Use CURSOR PAD ▶, ▲ and ▼ to highlight and select 1394 Device to be used.

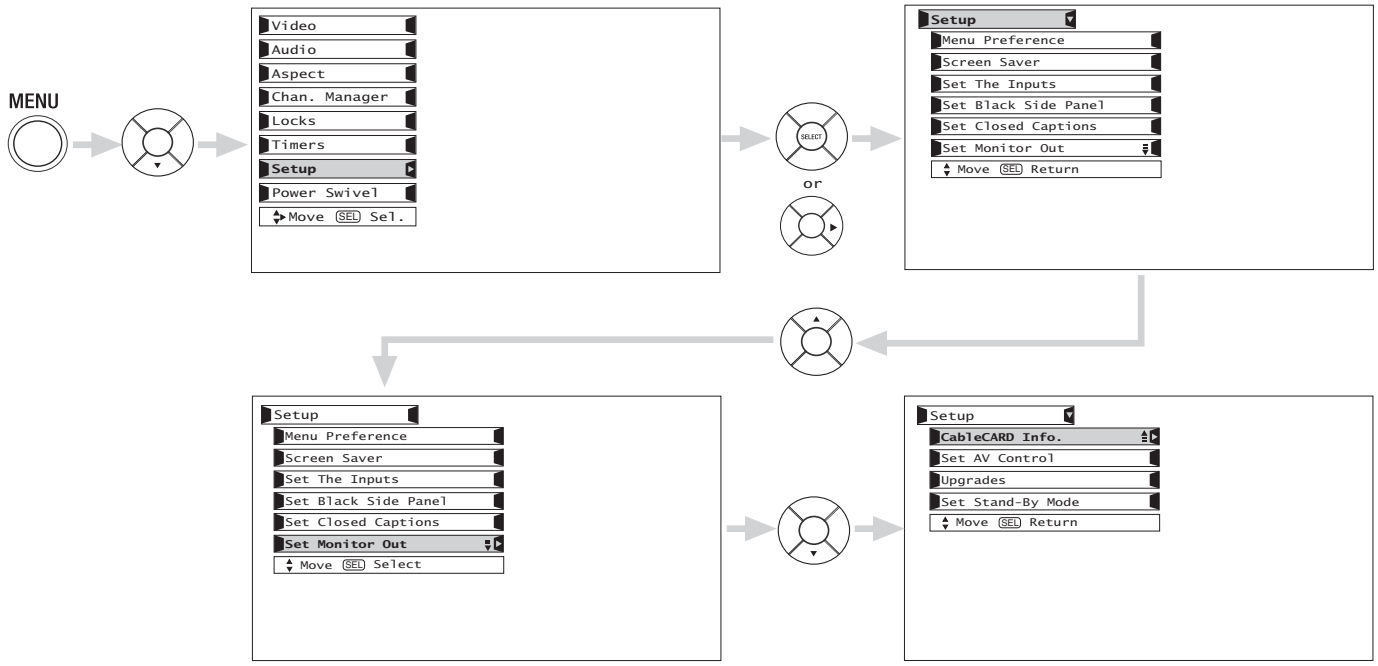
Press the SELECT button to return and highlight Record 1. Press SELECT button again to enable the Recording timer that you adjust. A "✓" in the box means it is enabled.

NOTES:

1. Set the Time and connect the IEEE1394 devices before using this feature.
2. The Timer Recording has priority over the Event Timer. If the Timer Recording is set at the same time as the Event Timer or overlaps with each other, the TV will only perform the function of the Timer Recording.

Setup

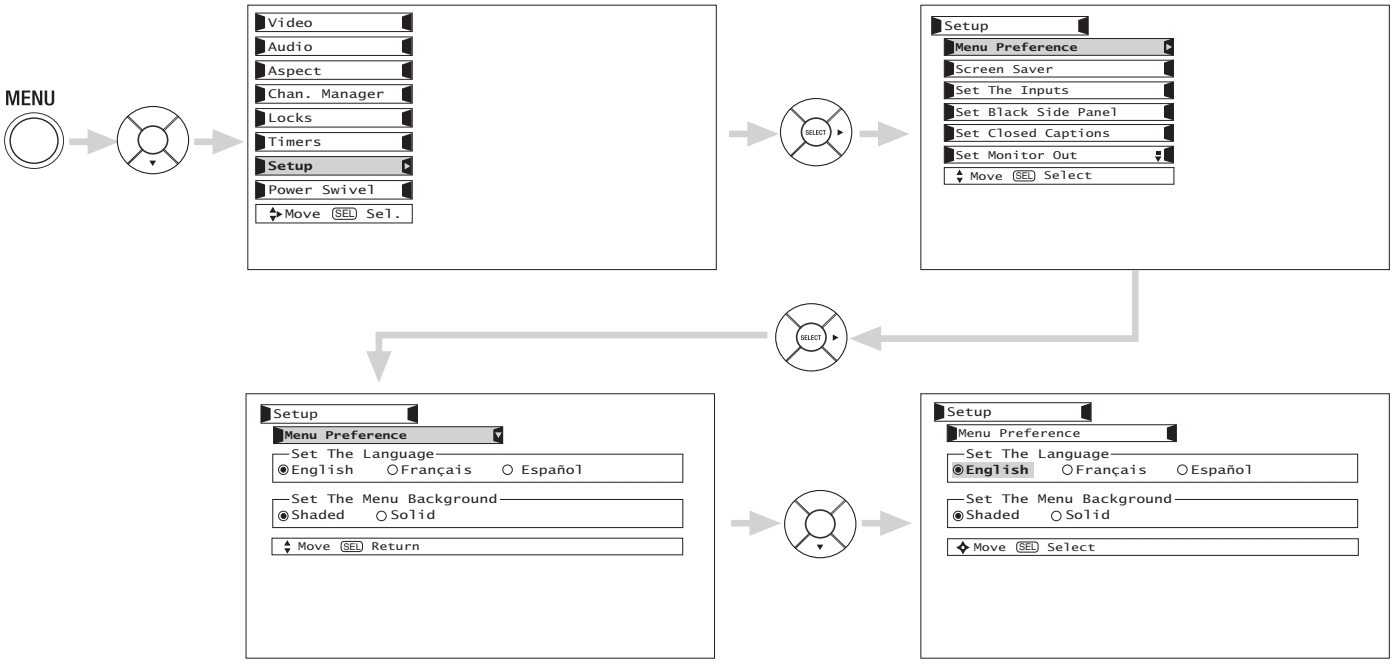
Select SETUP when setting up your TV for the first time. Use the CURSOR PAD ▲ or ▼ on the remote to highlight the function desired.



Use CURSOR PAD (▲, ▼, ◄, ►)to select the sub-menu of your choice.
Press the SELECT button to select.

Menu Preference

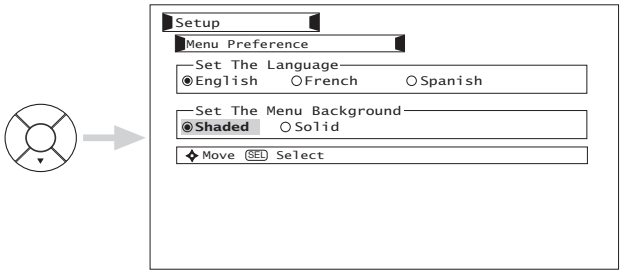
This feature will allow you to select any one of three different languages for all on-screen displays.



Use CURSOR PAD ◄ or ► to highlight the language of your choice.
Press SELECT to select the highlighted language.
Press EXIT to quit the menu select MENU PREFERENCE to return to the previous menu.

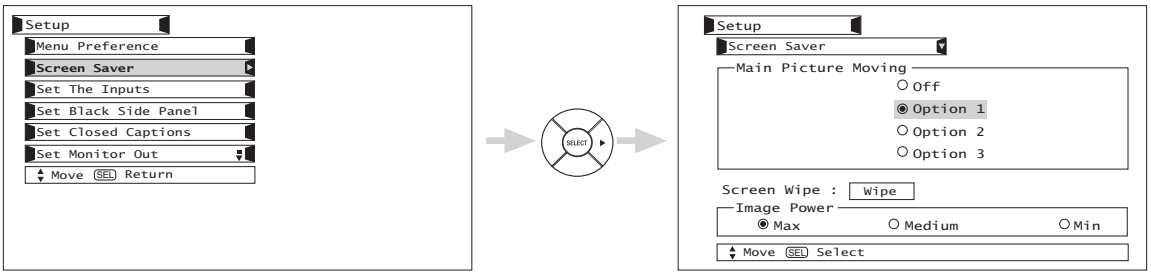
SETUP

Menu Background This function allows you to choose from two menu backgrounds.



Use CURSOR PAD ◄ or ► to highlight SET THE MENU BACKGROUND (shaded or solid), and the SELECT button to select the setting. Press EXIT to quit the menu.
Select SOLID and background is visible (no picture can be seen behind menu screen), select SHADED and a light background is visible.

Screen Saver Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to the Plasma Television. Use the SCREEN SAVER feature to hide screen burn.



Use CURSOR PAD ▲ or ▼ to highlight Screen Saver's Main Picture Moving options.
Press down on CURSOR PAD to select and EXIT to quit.

Option 1
The whole picture will shift every 20 minutes by two pixels.

Option 2
The whole picture will shift every 40 minutes by two pixels.

Option 3
The whole picture will shift every 60 minutes by two pixels.

Screen Wipe
If pattern mark occurs, use Screen Wipe (White Field Signal) for at least 10 minutes to refresh any damage that may have occurred from a pattern mark. Screen Wipe can resolve pattern mark to a certain degree, if caution is not used, permanent damage may occur. Press the EXIT button to return to normal viewing.

Screen Saver Picture's Movement

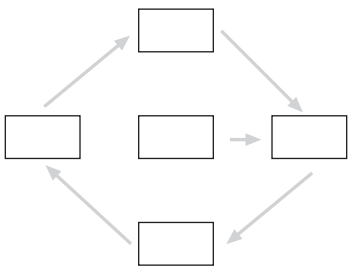
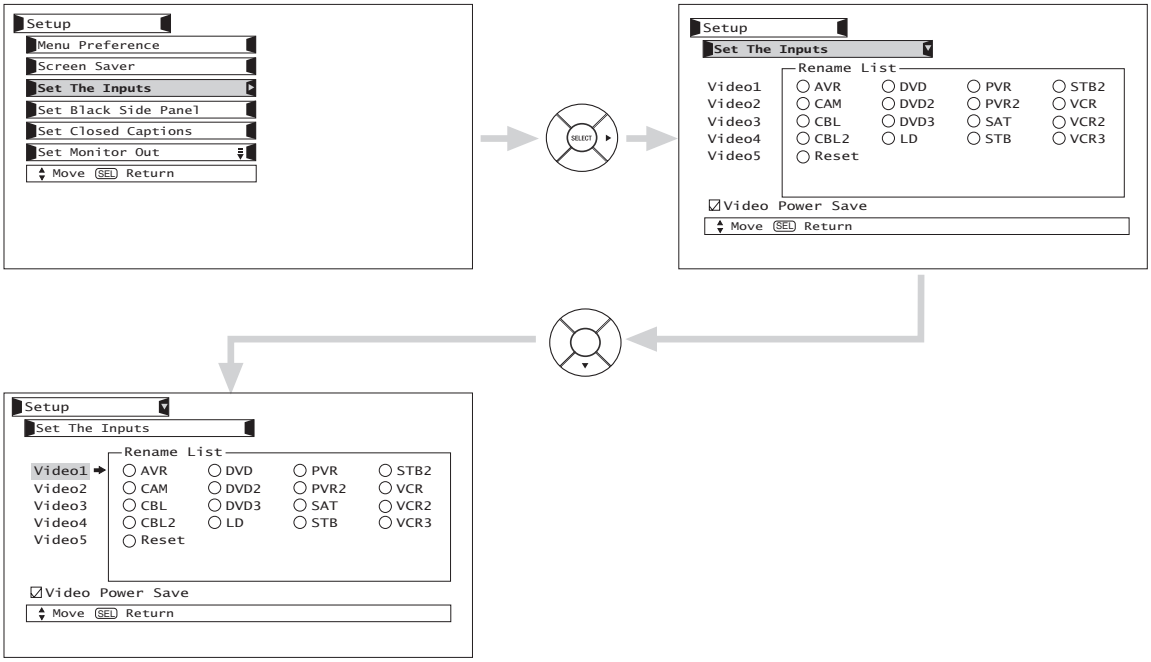


Image Power

This function allows you to choose Power Consumption reduction.

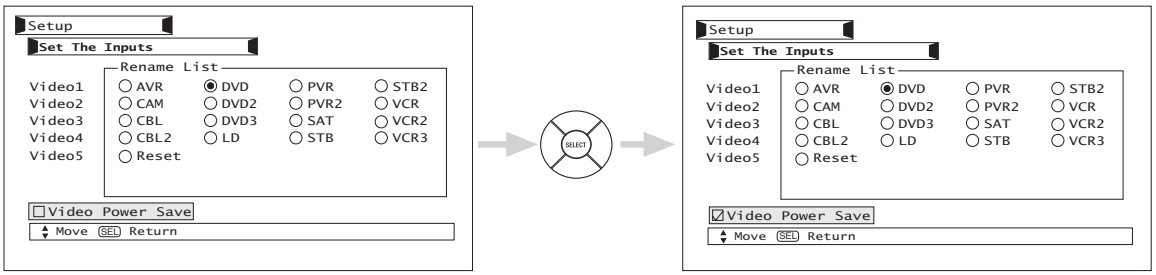
Set The Inputs Use this feature to give a name to any of the five video inputs.



Press CURSOR PAD ▲ or ▼ to highlight the name of the video inputs.
Press the CURSOR PAD ▶ to access the RENAME LIST.
Use the CURSOR PAD to navigate into the RENAME LIST and choose a name to the video input.
Press the SELECT button to select the desired input name.
Select RESET to set video names to original factory preset condition.
Press EXIT to quit the menu or select SET THE INPUTS to return to the previous menu.

NOTE: The video input name will be displayed only when video input is displayed as main picture.

Video Power Save Use this feature to reduce power consumption for video input when there is no video input signal. In RGB mode, this feature will always be on.



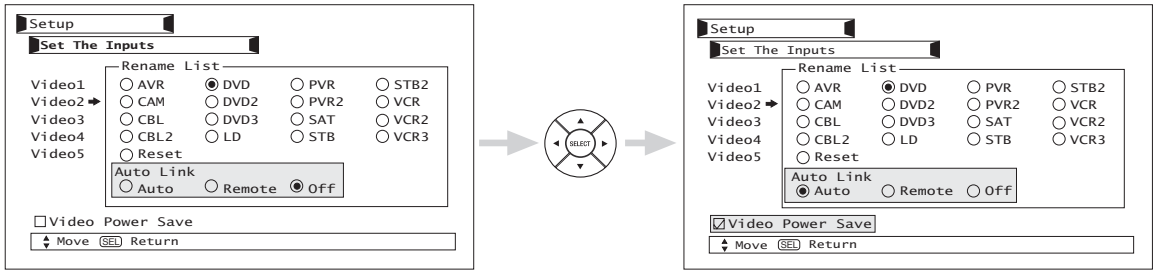
Press CURSOR PAD ▼ to highlight VIDEO POWER SAVE.
Press the SELECT button to select.
Press EXIT to quit the menu or select SET THE INPUTS to return to the previous menu.

NOTE: The AVC and Monitor will go to Stand-By mode (Off) after 45 seconds when no video input signal is detected.

SETUP

Video 2 Auto Link

Use this function to automatically turn the TV on and tune to Video 2 when it detects a video signal to input 2.



Use CURSOR PAD ▲ , ▼, ◄ and ► then press the SELECT button to change AUTO LINK setting.

When AUTO is selected, the TV will turn on and switch to Video2 automatically, when the Video2 input device is turned on. This is convenient when you want to watch a movie with your VCR, laserdisc player, or DVD player.

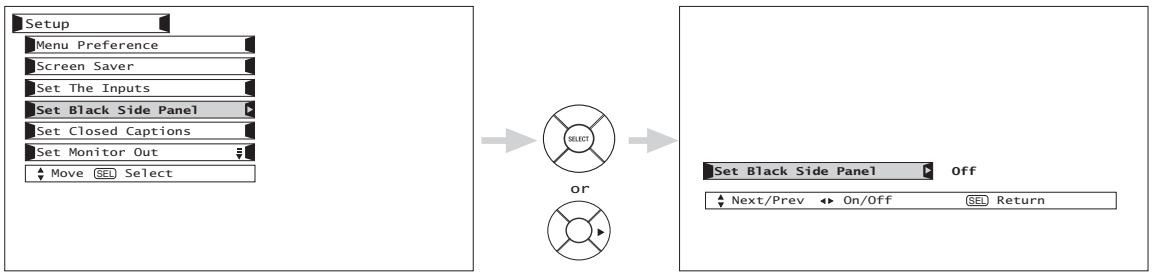
When REMOTE is selected, the TV will turn on and switch to Video2 automatically when the Video2 input device is turned on (VCR, laserdisc, or DVD) and any of the buttons on your remote control is pressed.

Select Off to disable this function.
Press EXIT to quit the menu or select SET THE INPUTS to return to the previous menu.

NOTES:
1. Once the TV has been turned on using the AUTO LINK feature, it must be reset before AUTO LINK is used again. To do this, turn your VCR, laserdisc, or DVD player OFF. This feature is now reset and will turn on your TV as described above.
2. When using REMOTE mode, any remote control button will substitute for your video input device play button. However, intended operation is for use with your VCR, laserdisc, or DVD play button.
3. If no remote control button is pressed after the TV is turned on by AUTO LINK, the TV will automatically turn off after three hours.

Set Black Side Panel

The BLACK SIDE PANEL function turns the gray side bars on/off when watching 4:3 signals in Standard mode.



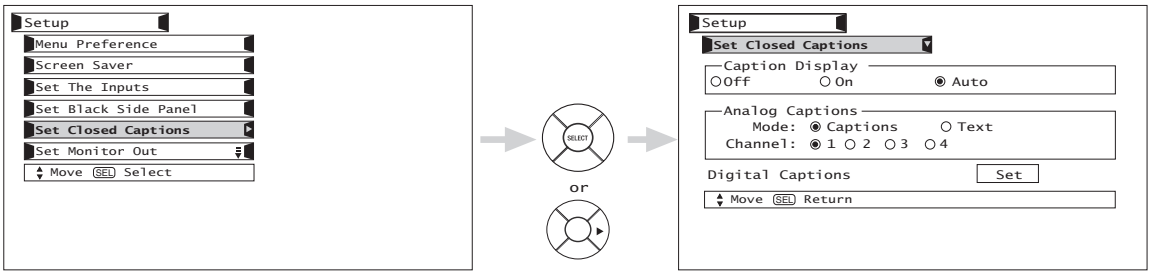
Press the CURSOR PAD ◄ or ► to set to ON or OFF.
Press EXIT to quit menu or select SET BLACK SIDE PANEL to return to the previous menu.

Setting / Signal	Off	On	Auto 1	Auto 2	Recomended Aspect
NTSC/480i/480p Aspect: 4:3 standard	Gray	Black			4x3 Expanded
1080i (4x3 source) Aspect: 16:9 standard			Gray	Gray	4x3 Expanded
1080i (4x3 source with logo on corner Aspect: 16:9 standard	Black	Gray			4x3 Expanded

NOTES:
1. To prevent screen burn when watching 4:3 signal, turn off the BLACK SIDE PANEL. It is recommended to watch 4:3 signal with gray side bar.
2. Depending on received signals, some images and Closed Caption displays may be missing when the Black Side Panel is set to Auto 1 or Auto 2.

Set Closed Caption

Closed Captions are the dialogue, narration, and/or sound effects of a television program or home video which are displayed on the TV screen. Your local TV program guide denotes these programs as CC or .



Caption Display: **On/Off** will turn the CC display on or off.

Auto will turn the CC display on when Mute/Soft Mute is on.

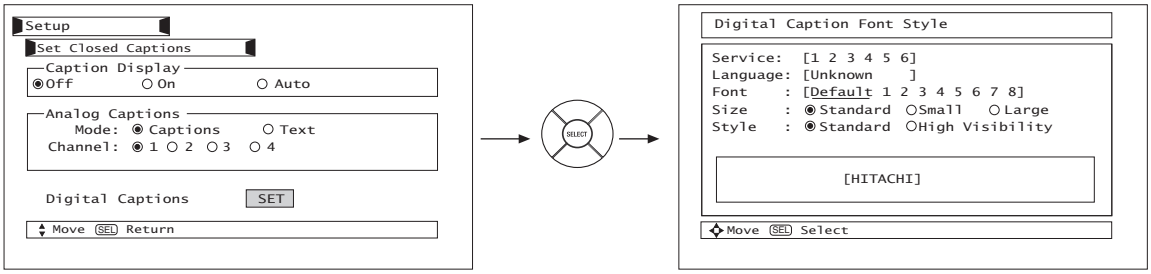
Caption Mode: **Captions** is for the program you are viewing.

Text is for additional information such as news reports or a TV program guide. This information covers the entire screen and viewing the TV program is not possible. Text may not be available with every CC program.

CHANNEL: **1** is used for the primary language (usually English).
2 is sometimes used for a second language (may vary by region).
3 is sometimes used for a third language (may vary by region).
4 is sometimes used for a fourth language (may vary by region).

Use the CURSOR PAD ▲, ▼, ◀ and ▶ to highlight the function to change then press the SELECT button to select the function.
Press EXIT to quit menu or select SET CLOSE CAPTION to return to previous menu.

Digital Captions: Set captions for digital programs. This function will help choose and set available language, font, size and style of digital captions.

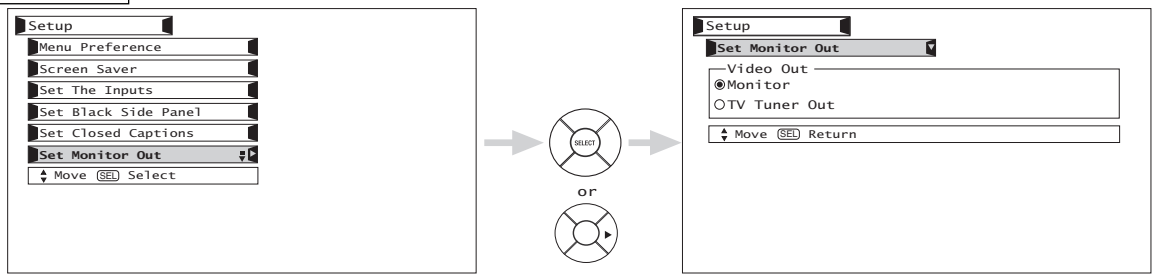


Use the CURSOR PAD ▲, ▼, ◀ and ▶ to highlight desired Digital Captions feature.
Press the SELECT button to select desired feature.
Press EXIT to quit menu or select SET CLOSE CAPTION to return to the previous menu.

NOTES:
1. Depending on the source, some types of digital closed captions may not work with this TV.
2. CAPTION DISPLAY will not work when viewing a 480p, 720p, or 1080i input via the COMPONENT: Y-P_BP_R inputs.
3. When PIP Surf is on, Closed Caption will not work.
4. Digital Captions Font Style are sometimes different from the Font Style of Analog Captions.
5. Closed Caption and Digital Captions availability and content depends on the broadcaster. Closed Caption is available when Closed Caption icon is displayed on screen.
6. Digital Captions will not be available (grayed out) when using analog channels.

SETUP

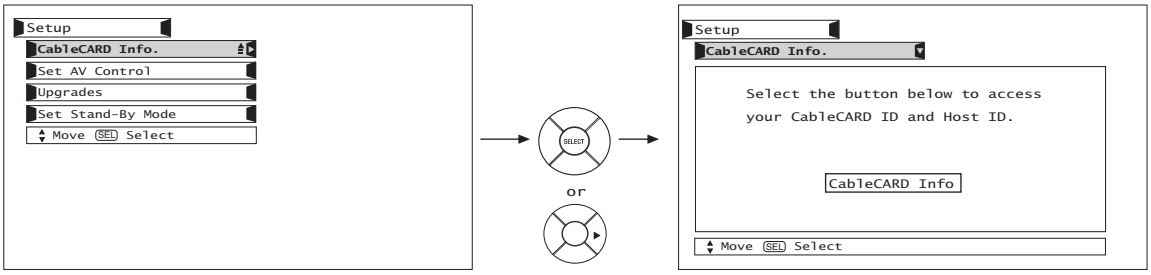
Set Monitor Out This feature will select the source of the Monitor Output.



Monitor- Select Monitor to output the audio and video signals of the chosen input source (ANT A, ANT B, VID1-VID5) to a VCR or other A/V device.
TV Tuner Out- Select TV Tuner Out to output the audio and video signals of the last watched Antenna Source (ANT A, ANT B).

Use CURSOR PAD ▲ and ▼ to highlight the function to change then press the SELECT button to select the function.
Press EXIT to quit menu or select SET MONITOR OUT to return to the previous menu.

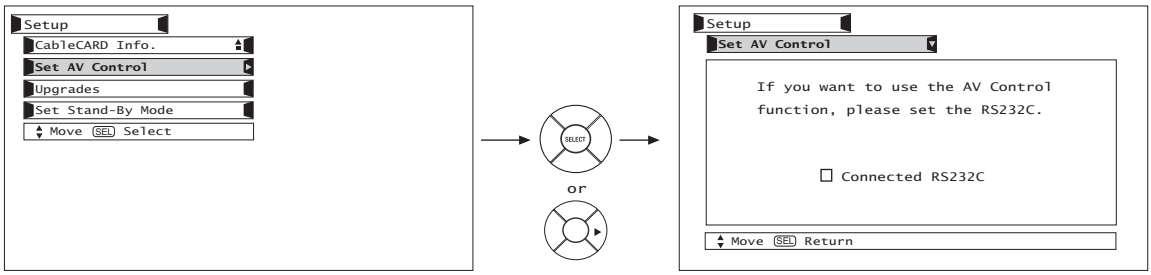
CableCARD Info Select this feature to access your CableCARD ID and HOST ID. Please have this information ready when you call your cable operator (see also page 13).



Use the CURSOR PADS and the SELECT button to access the CableCARD INFO.
Press EXIT to quit menu or select CableCARD INFO to return to the previous menu.

NOTE: This feature will not be available (grayed out) if the CableCARD is not installed properly.

Set AV Control This feature will select the AV Control feature. Set this feature if you want to control some of the TV functions from an external home control system.



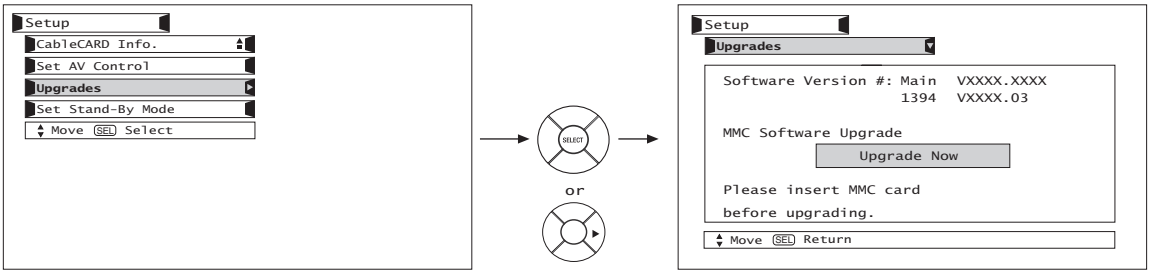
Use the CURSOR PADS and the SELECT button to check the Connected RS232C box.
Press EXIT to quit menu or select SET AV CONTROL to return to the previous menu.

NOTE: For use with third party home Audio/Video control systems which are commercially available. Please see your dealer regarding these “non Hitachi” home control systems.

SETUP

Upgrades

It shows software information and easy upgrade procedure. This function allows the TV software to be upgraded by using a flash card (MMC Card). If a future software upgrade is required for your TV, Hitachi will notify and provide you with a flash card. In order to receive written notification and the flash card, please complete and return the warranty card.

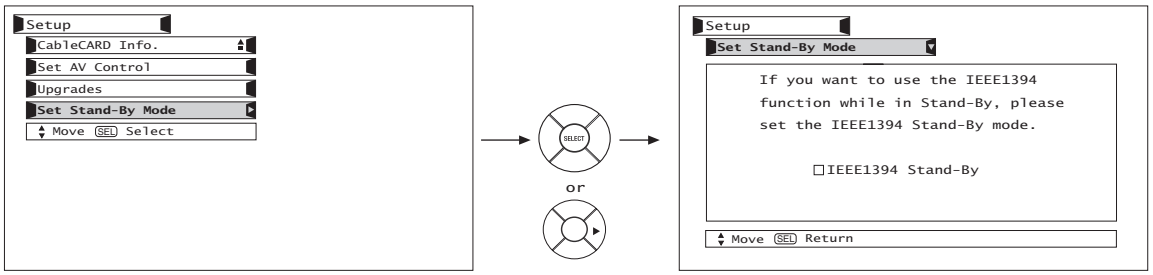


Insert MMC card, then press the CURSOR PAD ▲ or ▼ to highlight “Upgrade Now”. Press the SELECT button to select and start upgrading.

NOTE: Any power interruption during the upgrade process will cancel the upgrade. When this happens, repeat the upgrade procedure.

Set Stand-By Mode

This function sets the IEEE1394 in Stand-By Mode to ON or OFF. Certain digital devices have a power save feature, in which the device automatically powers OFF when not in use (sleep mode). Only by setting the IEEE1394 function in Stand-By mode to ON, will the TV be able to control a device that is in sleep mode.

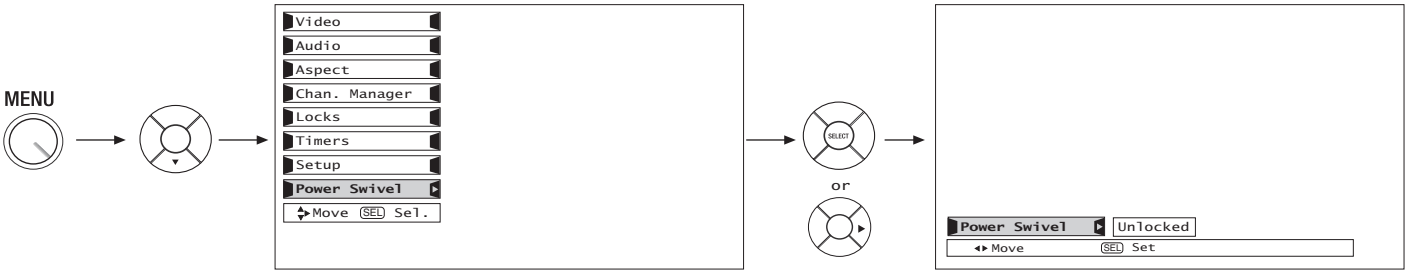


Use the CURSOR PAD ▲ or ▼ to highlight “IEEE1394 Stand-By”. Press the SELECT button to set this option.

NOTE: By turning ON the IEEE1394 function, your TV set will no longer be set for power saving Stand-By mode. The IEEE1394 Stand-By function must be set to OFF to return your TV set to the power saving Stand-By mode.

Power Swivel

This feature controls the motorized stand. It allows the customer to turn the plasma display left or right using the remote control. This feature is only available when the optional Table Top Stand is



Use the CURSOR PAD ◄ or ► to unlock or lock the Power Swivel.
Exit OSD menu system before controlling the motorized stand.

Use CURSOR PAD ► to rotate the TV to the right.

Use CURSOR PAD ◄ to rotate the TV to the left.

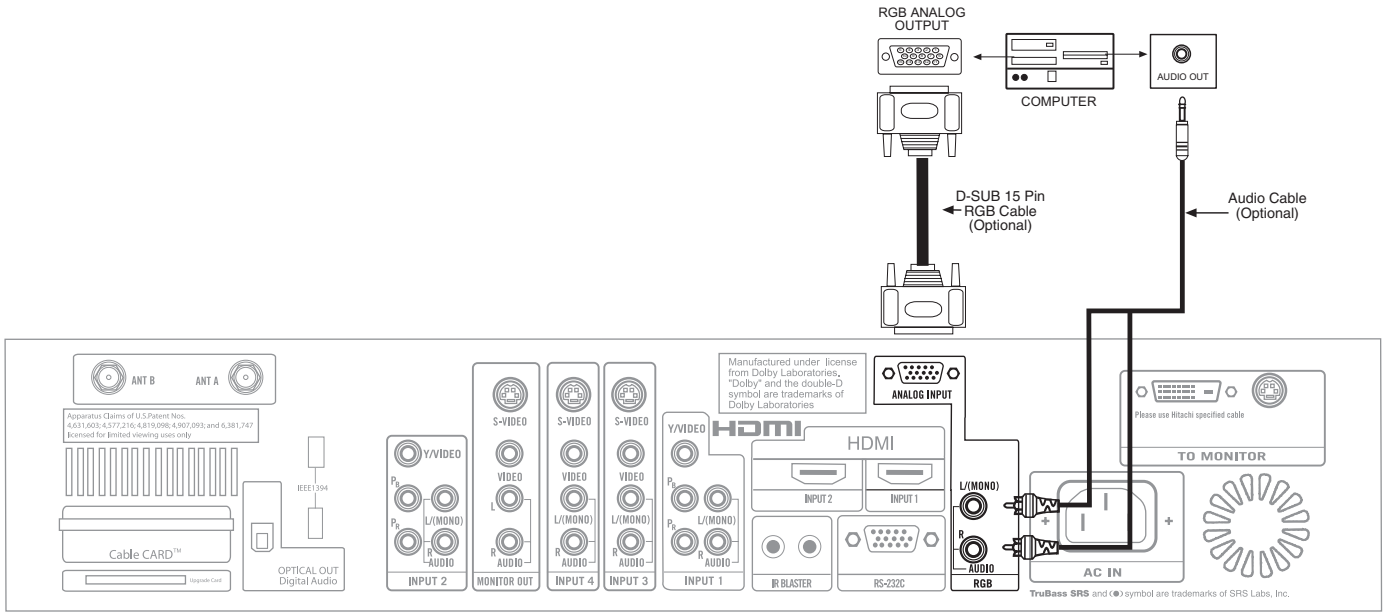
Release the CURSOR PAD to stop rotation.

NOTES:
1. The Power Swivel has a maximum turning radius of 30˚ (left and right).
2. Do not place any objects on the path of the monitor when using the power swivel feature.
3. Before using the power swivel feature, please make sure that the path of the monitor is clear of any fingers, hands or any other body parts to avoid causing injury.
4. When the Picture-in-Picture (PIP) or Freeze mode is ON, the Power Swivel is disabled.

RGB ON SCREEN DISPLAY

IMPORTANT: TURN OFF THE AVC BOX, THE DISPLAY MONITOR AND THE EXTERNAL COMPONENT BEFORE CONNECTING OR DISCONNECTING ANY CABLES.

1. AVC rear panel connection to an external component with an analog RGB output.



This Plasma Television can automatically detect and display the signal format below.

1. RGB input signal.
   This Plasma Television can accept the following signal formats.

Recommended Signal List

No.	Signal Mode			Horizontal Frequency (kHz)
	Signal Name	Resolution	Vertical Frequency (Hz)	
1	VESA	640 x 400	70.09	31.47
2	VGA	640 x 480	59.94	31.47
3	VESA	640 x 480	72.81	37.86
4		640 x 480	75.00	37.50
5		800 x 600	56.25	35.16
6		800 x 600	60.32	37.88
7		800 x 600	72.19	48.08
8		800 x 600	75.00	46.88
9		1024 x 768	60.00	48.36
10		1024 x 768	70.07	56.48
11		1024 x 768	75.03	60.02
12		1280 x 1024	60.02	63.98
13		1280 x 1024	75.03	79.98
14	1080i	1080	59.94	33.72
15	720p	720	59.94	44.96
16	480p	480	59.94	31.47

NOTE: 1. Dots correspond to the true resolution in Real Mode of aspect ratio, when you select VGA 640 x 480 signal from the table above. (One dot corresponds to one pixel). In addition, XGA (1024 x 768) and SVGA (800 x 600) for 55".
2. Always reset AUTO ADJUST feature when setting new display setting or when changing to a new computer (see page 75).

2. The new setting (horizontal position, vertical position, clock, and phase) of the signal will be stored. The monitor can store up to 13 settings in addition to the 15 pre-set signal timing. Any additional new settings (more than 15) will over-write the first user's setting, second setting and so on.

3. Operation in RGB mode in relation to TV functions are shown below.

No.	Item	Operation
1	Video Control	Contrast and brightness work separately, however, other picture controls
		are not available.
2	AV Net	Available.
3	Audio Settings	Not available.
4	Closed Caption	Not available.
5	Clock	Clock indication is shown.
6	Monitor Out	Both picture and audio are not available.
7	Lock	Not available.
8	Auto Link	Not Available.

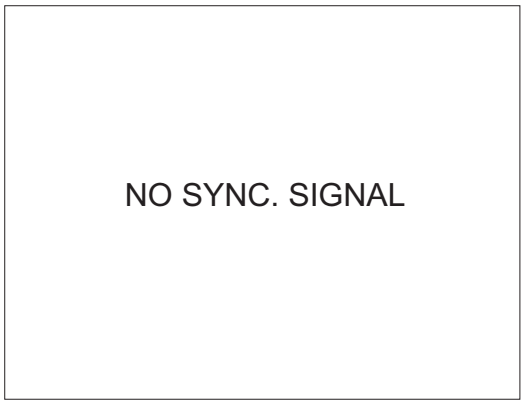
4. Other signal formats may not be displayed correctly. Use AUTO ADJUST to automatically adjust the horizontal position, vertical position, clock, and phase. We recommend you use a signal, which has more than 50% of amplitude of white area at each corner of the picture, when performing Auto Adjustment. It may not work correctly with dark picture (see page 88).

5. Input signal level.

SYNC	TTL level H/V separate signal
RGB INPUT	0.7Vpp/1.0Vpp

NOTE: Interlaced signal is not available.

6. RGB input signal will not appear at all when receiving a signal which is not supported by this product. If the setting is wrong, the Display Monitor will display:



Without sync

POWER SAVING mode will come on after 10 seconds.

Either horizontal or vertical frequency is inappropriate or out of range.

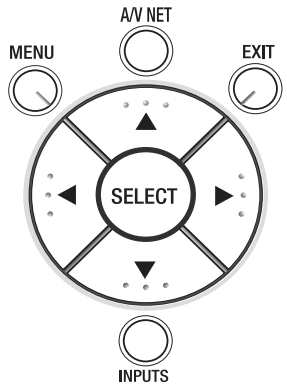
INVALID SCAN FREQ. will disappear after 60 seconds.

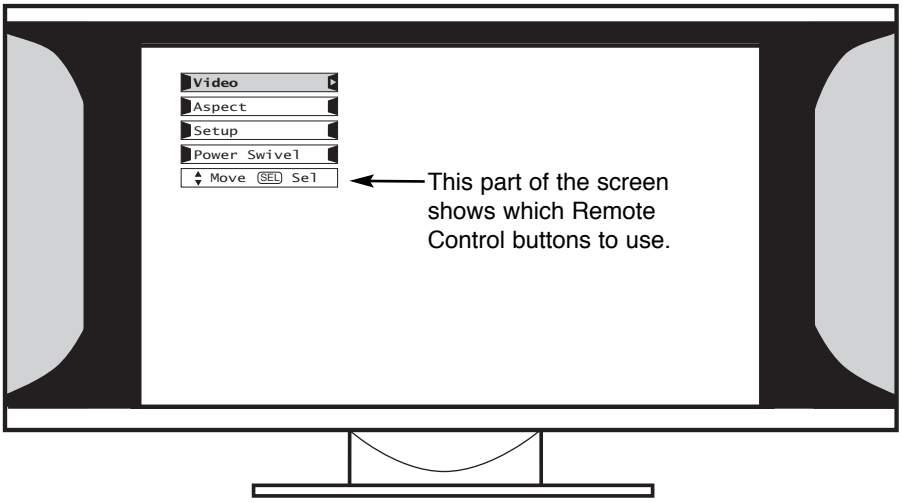
NOTE: 1. If the Display Monitor cannot display a signal, please try AUTO ADJUST to display the signal. This is used to initialize the MultiScan Converter.
2. Not all signals have AUTO ADJUST feature (see page 87).
3. Set-Top-Box and DVD player input signal does not have AUTO ADJUST feature.

RGB ON SCREEN DISPLAY

1. Press the MENU button, then use the CURSOR PAD ▲ or ▼ and SELECT button or CURSOR PAD ▶ on the remote control to display the different features in RGB MODE.

2. Press EXIT on the remote control to quickly exit from a menu.





RGB ON SCREEN DISPLAY

Video

Contrast	Change the contrast between black and white levels in the picture.
Brightness	Adjust overall picture brightness.
Color Temperature	Select between HIGH (9,300K), MEDIUM (7,500K), STANDARD (6,500K), or Black/White (5,400K).
Enhancer	Enhance picture details (Off, Low, Medium or High).
Reset	Recall the factory preset data of the RGB Video Settings.

Aspect

Real	Aspect as it is presented in its true resolution.
Normal	Aspect in 4:3 standard.
Full	Aspect in 16:9 standard.
WXGA Mode	Select WXGA Settings

Setup

Auto Adjust	Automatically adjust the geometry to fit the screen.
Horizontal Position	Adjust horizontal position.
Vertical Position	Adjust vertical position.
Horizontal Clock	Adjusts the dot clock frequency to reduce the vertical stripe.
Clock Phase	Adjusts the phase to correct blurred or unstable images.
Reset	Recall the factory preset data of the RGB setup settings.
Input Level	Set the preferred input signal level.
Black Side Panel	Turns the gray side bars ON/OFF when watching Aspect in Real and Normal signals in standard mode.

Power Swivel

Unlock	Power Swivel enabled. Controls motorized stand.
Lock	Power Swivel disabled.

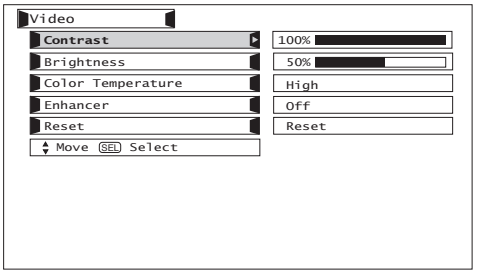
NOTE: The Power Swivel feature is only available when the optional Table Top Stand is connected.

VIDEO ADJUSTMENTS The following adjustments are independent of the TV mode:

- Press MENU in RGB mode for on screen display. Use the CURSOR PAD ▲ or ▼ to select VIDEO and then press SELECT or CURSOR PAD ▶ to be inside the video menu
- Press CURSOR PAD ▲ or ▼ to highlight the item to be adjusted.
- Press SELECT or CURSOR PAD ▶ to select the highlighted item.

CONTRAST

This feature allows you to adjust the contrast in RGB mode.

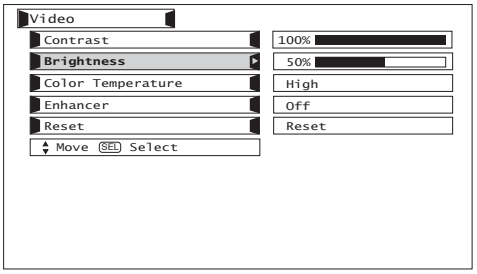


Use CURSOR PAD ◀ or ▶ to adjust contrast. Press MENU button to return to RGB MODE MENU and EXIT to quit.

NOTES: 1. Contrast can be set up to 110% if CURSOR PAD ▶ is pressed and held for more than 3 seconds.
2. See TV contrast feature for additional information regarding contrast.

BRIGHTNESS

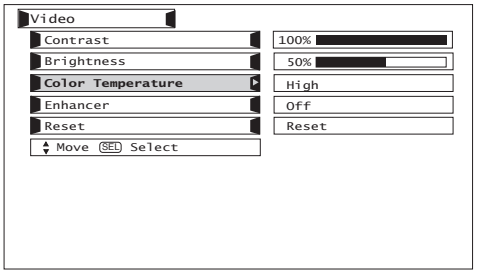
This feature allows you to adjust brightness in RGB Mode.



Use CURSOR PAD ◀ or ▶ to adjust brightness. Press MENU button to return to RGB MODE MENU or EXIT to quit.

COLOR TEMPERATURE

Use the CURSOR PAD ◀ or ▶ to change the COLOR TEMPERATURE. Set to HIGH for a cooler picture with more blue (1,200K), set to MEDIUM for more natural color (9,300K), or set to STANDARD for accurate color (6,500K), or Black/White (5,400K).

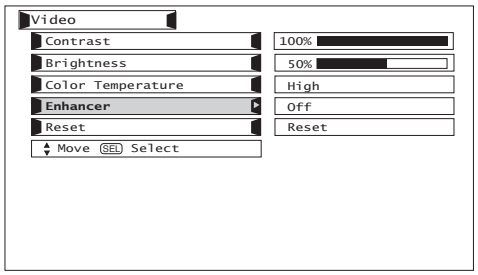


Press MENU button to return to RGB MODE MENU or EXIT to quit.

RGB ON SCREEN DISPLAY

ENHANCER

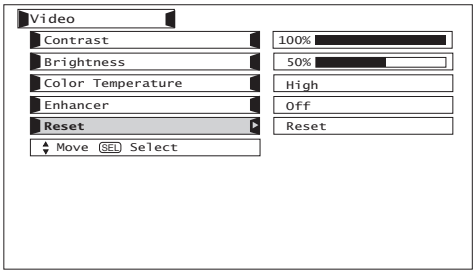
Enhances the picture detail.



Use CURSOR PAD ◀ or ▶ to set ENHANCER Off, Low, Medium or High. Press the MENU button to return to RGB MODE MENU or EXIT to quit.

RESET

Set CONTRAST, BRIGHTNESS, COLOR TEMPERATURE, and ENHANCER to factory preset condition.

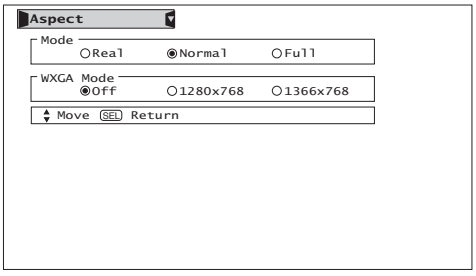


Use CURSOR PAD ◀ or ▶ to highlight Reset. Press the SELECT button to RESET to factory preset settings. Press the MENU button to return to RGB MODE MENU or EXIT to quit.

ASPECT

Use this function to select the picture format aspect ratio while using RGB input.

- •Press the MENU button in RGB mode.
- •Use the CURSOR PAD ▲ or ▼ to select ASPECT.
- •Press SELECT or CURSOR PAD ▶ to access ASPECT menu.



Use CURSOR PADS to highlight chosen selections. Press SELECT button to set and EXIT button to quit.

Recommendation

Input Signal	Mode	WXGA Mode
XGA	Normal	Off
WXGA (1280x768)	Full	1280x768
WXGA (1366x768)	Full	1366x768

RGB ASPECT DISPLAY MODE.

	RGB (Analog) INPUT SIGNAL					
	Others	SVGA/XGA	VGA	480p	720p	1080i
ASPECT MODE AVAILABILITY	X	REAL	REAL	REAL(1)	X	X
	NORMAL	NORMAL	NORMAL	NORMAL(1)	X	X
	FULL	FULL	FULL	FULL(1)	FULL(2,3)	FULL(2,3)

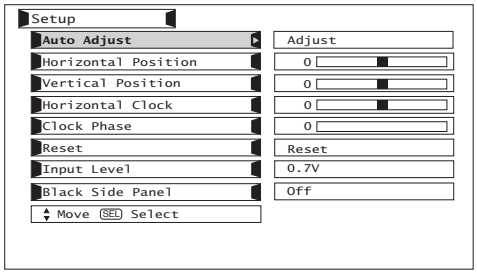
For numbers in ( ), please see corresponding note below.

NOTES:
1. Lack of raster can be seen in RGB when a 480p signal is input.
2. AUTO ADJUST function (see page 88) is not available in 720p, 1080i, and 480p input signal.
3. FULL aspect mode, only 95% of information can be displayed (5% is treated as overscan).

AUTO ADJUST

HORIZONTAL POSITION, VERTICAL POSITION, HORIZONTAL CLOCK and CLOCK PHASE for current RGB format are adjusted automatically.

- Press the MENU button in RGB mode.
- Use the CURSOR PAD ▲ or ▼ to select AUTO ADJUST.
- Press SELECT or CURSOR PAD ▶ to access AUTO ADJUST menu.

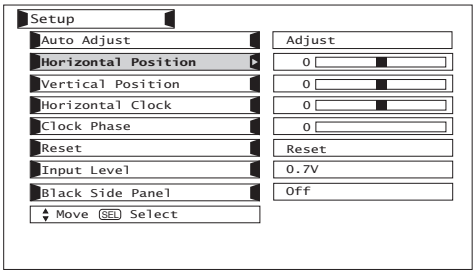


Use CURSOR PAD ◀ or ▶ cursors to highlight adjust.
Press SELECT to select AUTO ADJUST.

NOTES:
- Press SELECT to AUTO ADJUST the RGB mode.
- The other functions do not operate while AUTO ADJUST is in progress.
- Allow the Plasma TV to warm up for 20 minutes before performing AUTO ADJUST.
- Select a bright image for display while AUTO ADJUST takes place.
- If AUTO ADJUST terminates unsuccessfully, try AUTO ADJUST again. If AUTO ADJUST fails several times in succession, try using manual adjustment to adjust Vertical Frequency, Aspect Ratio, Timing Frequency and Picture.
- Always reset AUTO ADJUST when setting new display setting or when changing to a new

H POSITION

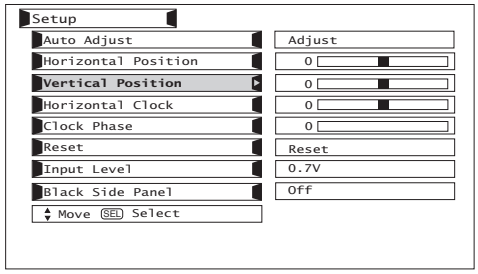
This feature allows you to adjust the horizontal position of the display.



Use CURSOR PAD ◀ and ▶ to adjust the horizontal position.
Press the MENU button to return to RGB Mode menu.
Press EXIT to quit.

V POSITION

This feature allows you to adjust the vertical position in RGB mode.

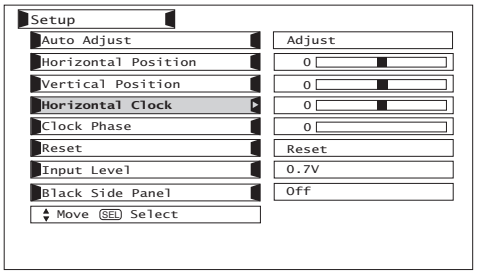


Use CURSOR PAD ◀ and ▶ to adjust the vertical position.
Press MENU button to return to RGB Mode menu.
Press EXIT to quit.

RGB ON SCREEN DISPLAY

HORIZONTAL CLOCK

Adjusts the pixel clock frequency to reduce the vertical stripe.

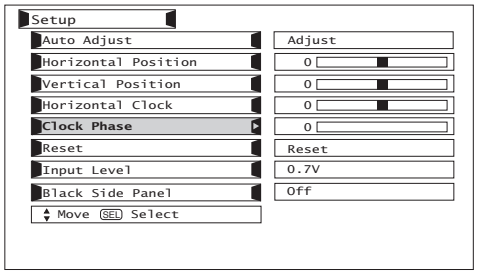


Use CURSOR PAD ◀ and ▶ to adjust the horizontal clock. Press the MENU button to return to previous menu. Press EXIT to quit.

NOTE: Due to varying signal content, you may see vertical or horizontal lines bend occasionally in RGB mode. However, this phenomenon is not a defect. It's caused by a lack of picture content due to under-scanning in RGB mode.

CLOCK PHASE

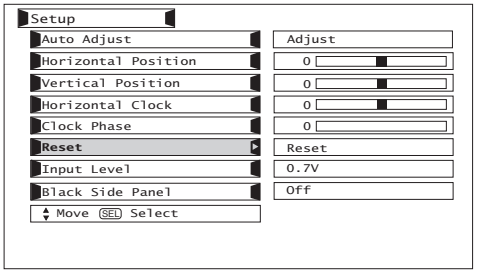
Adjusts the phase to correct blurred or unstable images.



Use CURSOR PAD ◀ and ▶ to adjust the clock phase. Press the MENU button to return to previous menu item. Press EXIT to quit.

RESET

Set HORIZONTAL POSITION, VERTICAL POSITION, HORIZONTAL CLOCK and CLOCK PHASE to factory preset, for current RGB format.

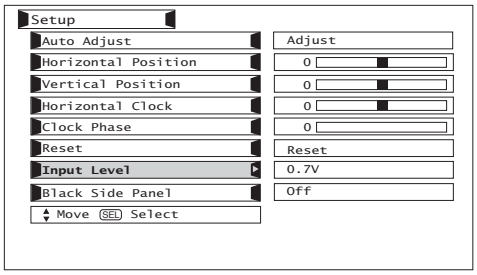


Use CURSOR PAD ◀ or ▶ to highlight Reset.

Press the SELECT button to RESET to factory preset settings.

INPUT LEVEL

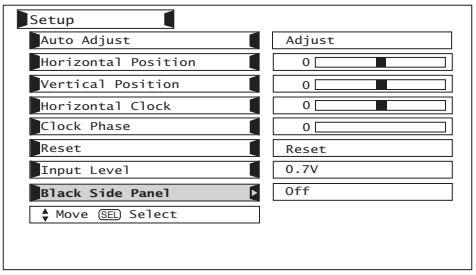
Select the Input Level voltage between 0.7V and 1.0V.



Use CURSOR PAD ◄ or ► to select between 0.7V and 1.0V depending on the amount of brightness in the picture.

BLACK SIDE PANEL

The BLACK SIDE PANEL function turns the gray side bars ON/OFF when watching Aspect in Real and Normal signals in Standard Mode.



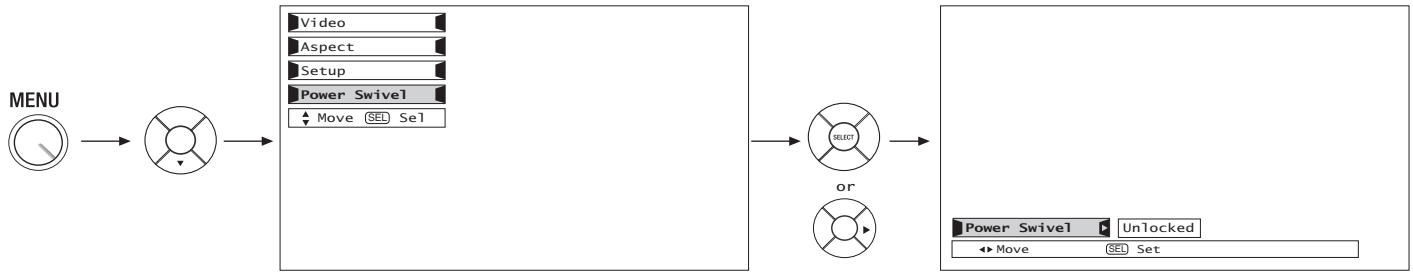
Press the SELECT button to select BLACK SIDE PANEL ON/OFF.

NOTE: To prevent the plasma phosphor from burning when watching Aspect in Real and Normal signal, turn off the BLACK SIDE PANEL. It is recommended to watch 4:3 signal with gray side bar.

POWER SWIVEL

This feature controls the motorized stand. It allows the customer to turn the plasma display left or right using the remote control. This feature is only available when the optional Table Top Stand is

- •Press the MENU button in RGB mode.
- •Use the CURSOR PAD ▲ or ▼ to select POWER SWIVEL.
- •Press SELECT or CURSOR PAD ► to access POWER SWIVEL menu.



Use CURSOR PAD ◄ or ► to Unlock or Lock the POWER SWIVEL.
Exit OSD menu system before controlling the motorized stand.

Use CURSOR PAD ► to rotate the TV to the right.

Use CURSOR PAD ◄ to rotate the TV to the left.
Release the CURSOR PAD to stop rotation.

NOTES:
1. The Power Swivel has a maximum turning radius of 30˚ (left and right).
2. Do not place any objects on the path of the monitor when using the power swivel feature.
3. Before using the power swivel feature, please make sure that the path of the monitor is clear of any fingers, hands or any other body parts to avoid causing injury.
4. When the Picture-in-Picture (PIP) or Freeze mode is ON, the Power Swivel is disabled.

CARE OF YOUR HITACHI PLASMA DISPLAY AND YOUR REMOTE CONTROL

DO

Dust the screen and frame with a cleaning cloth from the accessories pack.

Clean the screen and frame with a soft cloth moistened in warm water and dry with a soft cloth. A mild soap may be used if the screen is extremely dirty.

Place your Plasma Television away from extreme heat, humidity, and extremely dusty places.

Remove the plug (AVC Center/Display Monitor) from the wall outlet if your Plasma Television will not be used for a long period of time, for instance, when you go on vacation.

DO NOT

Do not clean your screen with strong cleaners, polishes or a chemically treated cloth.

Do not place rubber or vinyl products or cellophane tape on your Plasma Television.

Avoid repeatedly touching the screen.

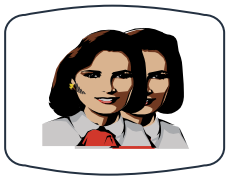
Do not subject the remote control to shocks such as dropping it on the floor, etc. This may cause physical damage to the precision parts.

Avoid placing the remote control in a high humidity place or getting it wet. Do not leave it on or near a heater. Excessive heat or moisture may cause the remote control unit to fail.

When the batteries run down, remote control operation will become erratic or become unresponsive. Replace the old batteries with two new “AA” or “AAA” size batteries. Do not use an old battery with a new battery.

Exposing the screen to direct sunlight for a long period of time or heat may cause damage to the plasma screen.

• IGNITION NOISE:
Black spots or horizontal streaks may appear, picture may flutter or drift. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.



• GHOSTS:
Ghosts are caused by the television signal following two paths. One is the direct path and the other is reflected from tall buildings, hills or some other objects. Changing the direction or position of the antenna may improve reception. Ghosting may also be caused by defects in the antenna system such as unshielded leads or connecting several sets to the same antenna without using multiple antenna couplers.

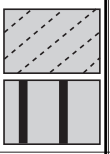
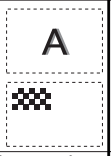
• SNOW:
If your receiver is located in the fringe area of a television station where the signal is weak, your picture may be marred by the appearance of small dots. When the signal is extremely weak, it may be necessary to install a special antenna to improve the picture.

• RADIO FREQUENCY INTERFERENCE:
The interference produces moving ripples or diagonal streaks, and in some cases, causes loss of contrast in the picture.
• PREVENTION OF AN OBSTACLE TO RADIO RECEIVERS
This monitor has been designed pursuant to the FCC class B Rules. This is to prevent a problem to Radio receivers. If this monitor causes a problem to Radio receivers, then take the following steps:

- Keep the monitor away from Radio.
- Adjust Radio antennas in order for the monitor not to receive interference.
- The antenna cable of Radio should be kept away from the monitor.
- Use a coaxial cable for antenna.

You can check if this monitor influences Radio receivers by turning off all other equipment other than the monitor.

If you find a problem receiving Radio when using the monitor, check the instructions mentioned above.

• The display image appears scrolling diagonal. • Text displayed across the screen appears vertically streaked, with the characters in vertical columns blurred. 	• Adjust the horizontal clock and clock phase. (Adjust the horizontal clock first, the clock phase next.) (RGB input)
• Text displayed across the screen appears blurred. • A fine pattern flickers when displayed on the screen. 	• Adjust the clock phase for the clearest viewing. (RGB input)
• Vertical stripes appear, depending on the screen contents.	• The plasma display panel is lighting the phosphors by the discharge of internal radiation. Depending on the screen contents, in rare cases this may cause vertical stripes to appear because of failure to light. Please note that this is not a malfunction.
• Coarse horizontal stripes appear in FULL display.	• Adjusting the clock phase will reduce the horizontal stripes. (RGB input)
• The display dims to make the picture invisible during special playback of a VCR (FF, REW).	• This condition may occur when the unit is connected to a VCR with component output, such as 480i, but it is not a failure. But when it occurs, switch to composite output or S1 (S2) output).

SYMPTOMS	CHECK THESE ITEMS AND TRY THESE ADJUSTMENTS: Be sure external connection is correct	Be sure power cord is plugged in	Be sure TV is switched "ON"	Try another channel (station trouble)	Check antenna connections (back of TV)	Check antenna for broken lead-in wire	Check outside antenna	Check for local interference	Adjust Contrast control	Adjust Brightness control	Adjust Color control	Adjust Tint control	Adjust Volume control
No Picture, no sound	●	●	●	●	●	●	●						
Sound OK, picture poor	●			●	●	●	●	●	●	●			
Picture OK, sound poor	●			●	●	●	●	●					●
Picture blurred	●			●	●	●	●	●					
Lines or streaks in picture				●	●	●	●	●					
Poor reception on some channels				●	●	●	●	●					
Picture rolls vertically				●				●					
No color	●			●	●	●	●				●		
Poor color	●			●	●	●	●				●	●	

IMPORTANT NOTES

No.	Items	Notes
1	Arching sound from plasma display monitor's panel.	A buzzing sound might be heard when the plasma display monitor is turned on in a very quiet room. This is due to the plasma panel drive circuit when it is functioning. This arching sound is normal and it is not a malfunction.
2	Interference for infrared equipment.	Some infrared rays are emitted from the plasma display monitor's panel that might affect other infrared controlling equipment.
3	Bright and dark spots	High-precision technology is used to manufacture the plasma display panel; But in some cases, there are minor defects in some parts of the screen. Points that do not light, points with brightness different from that of the periphery, points with color different from that of the periphery, etc. Some pixels will always be on or always off. Please note that this is not a malfunction.
4	Picture Image (Spectrum)	When receving still picture signals, (e.g. channel number indication or clock indication) for a while, you can see image-like when the picture varied. This is not a defect.
5	Display panel surface temperature is too high	The plasma display panel is lighting the phosphors by the discharge of internal radiation. In some cases, this may cause the temperature of the panel surface to increase. Please note that this is not a malfunction. The Plasma TV surface temperature is higher than a Cathode-ray-tube.
6	Plasma Surface	The plasma panel is made from glass. Heavy shock on the front panel might damage it.
7	Transportation	When the PDP monitor is transported horizontally, the glass panel has the possibility of being broken or increasing the picture defects. At the time of transportation, horizontal style is prohibited. More-over, please treat the plasma panel with great care because of a precision apparatus. Please instruct transporters so that it should be put into the packing box at the time of shipment.(There is a possibility that breakage of the panel or defects will increase.) Rough transportation might cause damage to the panel and pixel failure.
8	Image retention	The plasma monitor illuminates phosphor to display images. The phosphor has a finite illumination life. After extended periods of illumination, the brightness of the phosphor will be degraded to such extent that stationary images would burn-in that part of the screen as grayed-out images. Brightness will decrease automatically during still and slightly moving pictures. This is not a failure. This is a special feature to avoid image retention. Tips to prevent such image retention are: - Do not display images having sharp brightness differences or hi-contrast images, such as monochrome characters and graphic patterns, for long. - Do not leave stationary images appearing for long, but try to refresh them at appropriate intervals of time, or try to move them using screen saver function. - Turn down the contrast and brightness controls.
9	Luminosity and contrast	PDP television has luminosity and low contrast compared with CRT television.
10	Granular spots	When a screen is seen at point-blank range, a random fine grain may be visible to a dark part.
11	Disturbance to video apparatus	If an apparatus (VCR, etc.) antenna line is arranged near the monitor, the image may shake, or disturbance may be received.
12	Lip Sync	There is some time lag betweeen the picture and the sound. You can see lip motion that is delayed compared to the sound.
13	About the use environment of PDP television (temperature)	Electric discharge/luminescence characteristic of the PDP panel also changes with peripheral temperature. Moreover, since there is also high power consumption value, a specified temperature environment is required.
14	Caution on prolonged storage	Storing the plasma television for a period of more than 2 to 3 months without use might cause an unstable picture when the set is turned on.
15	Operating	Operating altitude: 800 to 1,114hPa (6,194ft to -2,484ft). Operating temperature: 41˚F to 95˚F.
16	Storage	Storage Altitude: 300 to 1,114hPa (31,912ft to -2,484ft). Storage temperature: 5˚F to 140˚F.
17	Power ON or OFF	Frequent use of the Power ON or OFF might trigger the power protection circuit. If the TV does not turn ON, please wait a little before turning ON again.

PLUG and PLAY

This Plasma Television complies with VESA DDC2B specifications, Plug & Play is a system with computer, peripherals (including monitors) and operating system. It works when the monitor is connected to a DDC ready computer that is running an operating system software that is capable for the plug & play.

When a Plug and Play PC is powered on, it sends a command to the Monitor requesting identification. The Monitor sends back a string of data including its characteristics.

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This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Cable Compatible Television Apparatus- Tèlèvision câblocompatible, Canada.

Notes on Closed Caption:
This Plasma Television receiver will display television closed captioning, (CC or), in accordance with paragraph 15.119 of the FCC rules.

AGENCY REGULATORY INFORMATION

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hitachi Home Electronics (America), Inc. may void the user's warranty.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Any cables that are supplied with the system must be replaced with identical cables in order to assure compliance with FCC rules. Order Hitachi spares as replacement cables.

Declaration of Conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions regarding this declaration, contact:

Hitachi America, LTD.
Home Electronics Division
900 Hitachi Way
Chula Vista, CA 91914-3556
Tel. 1-800-448-2244 (1-800-HITACHI)
ATTN: CUSTOMER RELATIONS

USEFUL INFO

Features:
- New Easy-to-Use On-Screen Menu Control (3 Language)
- New AV Network System Control
  - Control up to 4 components with one remote
  - 2 IR Mouse cables included
  - Control Codes Stored in AV Control Center
- Two Tuner Split Screen except RGB modes.
- Illuminated and Preprogrammed Remote Control
- Simple Remote Control
- Power Management: ON/OFF via signal detection
- Menu Control Keys accessible from AV Control Center
- Picture Enhancement
- Input Signal Identification
- CableCARD compatible - Contact your local cable operator for more information
- HDMI (High Deifinition Multimedia Interface)(High Bandwidth Digital Content Protection V1.1 Compatible)
- Photo Input (for your digital camera)

Video:
- 1366 x 768 Display Resolution
- ALiS (Alternate Lighting of Surfaces Technology)
- e-ALis (extended-ALis)
- High-Contrast Pure-Color Glass Shield
- Wide Viewing Angle: More than 160˚
- 4 Color Temperature Presets: Black/White-5400K, Standard-6500K, Medium-9300K, High-1200K.
- Multiple Screen Fill Modes (4:3 Standard/Expanded/Zoom1/Zoom2/16:9 Standard/Zoom)[1]
- 4MB 10-bit 3D Y/C Comb Filter
- Picture Modes (Day and Night)
- Computer Display: VGA, (SVGA, XGA, SXGA-scaled)

Inputs:
- Power Input . . . . . .AC 120V, 60Hz
- Power Consumption
  - Refer to rear panel at the back of the Plasma Monitor and the bottom panel of the AVC Center
- Antenna input impedance . . . . . .75 Ohm
- Channel coverage . . . . . .191ch.
  - VHF-Band . . . . . .2 ~ 13
  - UHF-Band . . . . . .14 ~ 69
  - CATV Mid Band . . . . . .A-5 ~ A-1
  - . . . . . .A-I
  - Super Band . . . . . .J-W
  - Hyper Band . . . . . .W+1 - W+28
  - Ultra Band . . . . . .W+29 - W+94
- Video . . . . . .1.0Vp-p, 75 Ohm
- S-Video
  - Luminance (Y) . . . . . .1.0Vp-p, 75 Ohm
  - Chrominance (C) . . . . . .0.286Vp-p, 75 Ohm
- Component Video
  - Luminance (Y) . . . . . .1.0Vp-p, 75 Ohm
  - Chrominance (P_B/P_R) . . . . . .0.7Vp-p, 75 Ohm
- Audio input Impedance . . . . . .47k Ohm
- Average input level 470mVrms
- RGB . . . . . .0.7Vp-p, 75 Ohm
- HDMI . . . . . .(19 PIN)

Outputs:
- Video . . . . . .1.0Vp-p. 75 Ohm
- Audio . . . . . .470mVrms, 1k Ohm
- Optical Out (Digital Audio) . . . .1 Optical Connector

Audio:
- MTS Stereo/SAP
- TruBass and Matrix Surround
- 10W+10W
- Soft Mute (50% and 100%)

Supplied Accessories:
- Remote Control (2)
- Batteries
- 9' Monitor Connection Cable
- 6' AC Cable (2)
- Subwoofer Cable
- IR Mouse Cable (2)
- Speaker Wires

Optional Accessories:
- 55" Table Top Stand (TTB55)
- Wall Mount (WM51)

INPUTS/OUTPUTS
- Inputs: .....RGB, VIDEO 1-5
- Wideband Component Y, Pb,Pr 2
- RGB: Analog Input 1
- Composite Video.....5
- S-Video 3
- Antenna (RF) Inputs.....2
- Audio Output 1
- Monitor Output 1
- Headphone Output.....1
- Subwoofer Output 1
- HDMI 2
- Photo Input.....1
- IEEE 1394.....2

SPECIFICATIONS
- Multi-Scanning: .....24-109kHz (h), 50-85Hz (v)
- Pixel Pitch .....0.90(horiz.) x 0.90(vert.) mm (55")
- FCC class: .....B for Consumer Use
- Power Requirements: 108-132V, 60Hz

DIMENSIONS

• Height (in.)	34	• Depth (in.)	4 4/16
(mm)	856.5	(mm)	107.2
• Width (in.)	61 1/4	• Weight (lbs.)	152.0
(mm)	1556.0	(kg)	69.0

Audio Video Control Center

• Height (in.)	3 3/16	• Depth (in.)	10
(mm)	85.0	(mm)	255.4
• Width (in.)	16 15/16	• Weight (lbs.)	9.2
(mm)	430.0	(kg)	4.2

[1] Screen mode availability varies by input format

HDTV Monitors display HDTV when combined with an HDTV Tuner and Source.

All specifications, weights, and dimensions are subject to change without prior notice. Please access www.hitachi.com/tv for detailed specifications and dimensions for custom installations.

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Hitachi America, LTD.
Home Electronics Division

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Hitachi America, LTD.
Home Electronics Division
900 Hitachi Way
Chula Vista, CA 91914-3556

Hitachi Canada, LTD.
Digital Media Division

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(1-800-448-2244)

Monday - Friday EST 9:00am - 7:00pm
Saturday EST 9:00am - 5:00pm

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(1-800-448-2244)

Lundi - Vendredi L'EST 9:00am - 7:00pm
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